# MISSOURI DEPARTMENT OF MENTAL HEALTH

# Alcohol, Drug and Tobacco Use in Missouri: A Profile in Prevention and Treatment – 2006

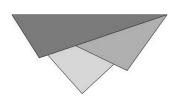


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The Missouri Department of Mental Health, Division of Alcohol and Drug Abuse is pleased to present this first annual *Alcohol, Drug and Tobacco Use in Missouri: A Profile in Prevention and Treatment - 2006* report. This report provides data that illustrates the prevalence of – and trends in – alcohol, drug and tobacco use and abuse in Missouri. When possible, Missouri data are compared to national prevalences and trends. Additionally, this report presents data on the costs and consequences of substance use and abuse in Missouri.

The Division of Alcohol and Drug Abuse implements and supports statewide alcohol and drug abuse prevention services. The Division also contracts with health care providers throughout the state to provide publicly-supported substance abuse programs that treat tens of thousands of Missourians each year. This report briefly summarizes the Division's prevention and treatment services and programs, including program-specific data on the number and type of people served, characteristics of service and treatment outcomes.

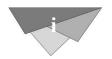
Additional information regarding prevention and treatment services is available from the Division's main district offices, located in Kansas City, St. Louis and Jefferson City and its smaller satellite offices in Springfield and Rolla. District office addresses and phone numbers are shown on the map in Appendix B-D.

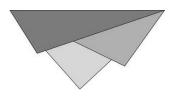
Inquiries and comments pertaining to this report should be directed to the Division of Alcohol and Drug Abuse, Research and Statistics Unit. Further information on the Division, its programs and services and other statistical reports and facts can be accessed through the Division's website at <a href="http://www.dmh.mo.gov/ada/adaindex.htm">http://www.dmh.mo.gov/ada/adaindex.htm</a>.

It is the Division's goal to share the data in this report, along with other information available on its website, facilitate statewide planning and implementation to improve the well-being of Missourians. I look forward to a continuing flow of information from this Division that will help guide and direct these efforts in reaching our vision where "all Missourians are free to live their lives and pursue their dreams beyond the limitations of alcohol and other drug abuse."

Sincerely,

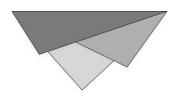
Michael Couty





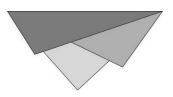
Substance abuse, the nation's number one health problem, places an enormous burden on society. Substance abuse and addiction, which cross all societal boundaries, are associated with many of the country's most serious problems: child and spousal abuse, teen pregnancy, school failure, motor vehicle crashes, escalating health care costs, low worker productivity and homelessness. Missouri state government spends an estimated \$1.325 billion annually on substance abuse, an estimated \$245 per Missourian. Of every \$100 of state spending related to substance abuse, only 3% is spent on prevention and treatment, with the remainder spent on law enforcement, incarceration, medical services, etc. The Division of Alcohol and Drug Abuse (ADA) works side by side with individuals, families, agencies and diverse communities to establish quality prevention and treatment programs so that all Missourians are able to live without the limitation of substance dependence and abuse. Following is a statistical overview of Missouri's problem and ADA's prevention and treatment services.

- Prevalence of Substance Use or abuse
  - Alcohol
    - The percentage of Missourians reporting current alcohol use **decreased**. However,
      - heavy drinking increased among adult females and
      - o binge drinking **increased**, notably among adolescents.
    - The percentage of Missouri high school students reporting driving while drinking or riding with a driver who had been drinking **decreased**.
  - Marijuana
    - The percentage of Missourians reporting marijuana use **increased**, primarily due to **increased** use among adolescents. However,
      - o first-time use of marijuana while an adolescent decreased.
  - Cocaine
    - The overall percentage of Missourians reporting cocaine use **decreased**. However,
      - o past year cocaine use among adolescents increased.
  - Other Illicit Drugs
    - The overall percentage of Missourians reporting any illicit drug use decreased. However,
      - o use of illicit drugs (other than marijuana) among young adults increased.
    - The percentage of Missouri high school students reporting methamphetamine, Ecstasy, steroid, inhalant and intravenous drug use **decreased**.



#### Tobacco

- The overall percentage of Missourians reporting current use of any tobacco slightly decreased. However,
  - o use of any tobacco among older adults slightly increased.
- The percentage of Missourians reporting smoking cigarettes decreased.
- The percentage of Missouri high school students reporting trying cigarettes, smoking cigars, or using smokeless tobacco decreased.
  - o the percentage of current smokers reporting trying to quit **decreased**.
- Perception of Risk and Need for Services
  - o Risk The percentage of Missourians who perceive a risk associated with smoking increased. However,
    - perceived risk due to binge drinking decreased, especially among young adults and
    - perceived risk due to smoking marijuana **decreased** among adolescents and young adults.
  - Need Approximately one in every ten Missourians 12+ years report a recent period of alcohol dependence or abuse and one in 33 report illicit drug dependence or abuse.
    - Over 500,000 Missourians need, but are not receiving, treatment for alcohol or drug dependence or abuse.
    - The percentage of Missourians reporting alcohol dependence or abuse and needing but not receiving treatment increased.
    - The overall percentage of Missourians reporting illicit drug dependence or abuse and needing but not receiving treatment slightly **decreased**. However,
      - o illicit drug dependence or abuse increased statewide among adolescents, as did the number of those needing but not receiving treatment.
- Societal Consequences
  - Morbidity and Mortality
    - The number of births affected by maternal substance abuse recently **increased**.
    - The number of alcohol- and drug-related hospitalizations and emergency department encounters has steadily increased, with over 90,000 in 2005.
      - o In 2005, hospitalization and emergency department charges exceeded \$120 million.

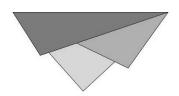


#### Family Discord

- The number of substantiated alcohol- and drug-related incidents of family child abuse or neglect **decreased**, as did the number of out-of-home placements due to parental alcohol use. However,
  - o out-of-home placements due to parental drug use increased.
- The number of alcohol-, drug- and tobacco-related removals from public elementary and secondary schools increased.

#### Criminal Activity

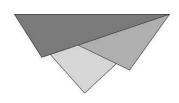
- Overall, the number of alcohol-related indicators of criminal activity (traffic crashes and injuries, arrests, incarcerations, etc.) has generally but not uniformly **decreased**. However,
  - o drug-related indicators of criminal activity have generally but not uniformly increased.
- Approximately one-quarter of the Department of Corrections inmate population was incarcerated for drug- or DWI-related offenses.
  - o Almost nine-tenths required substance abuse intervention.
  - Incarcerating drug and DWI offenders cost over \$110 million annually.
- Approximately four-fifths of parolees and probationers were supervised for drug- or DWI-related offenses.
  - o 85% of parolees and 70% of probationers report substance abuse or dependence.
  - o Supervising parolees and probationers for drug- or DWI-related offenses costs over \$25 million annually.
- For juveniles, the number of court referrals for alcohol and drug offenses **decreased**, as did the number of commitments to state custody.
- ADA-Supported Prevention and Treatment Services and Outcomes
  - o Prevention Efforts
    - In Fiscal Year 2006, ADA-funded prevention served:
      - o 4.5 million Missourians (one in every 1.3) through statewide prevention messages.
      - o Over 51,000 Missourians (one in every 114) through Regional Support Centers,
      - o Over 79,500 Missourians (one in every 73) through community-based programs,
      - Almost 4,000 school-aged children (one in every 300) through school-based programs and
      - o Over 2,000 Missourians with hearing impairments.



#### o Treatment Efforts

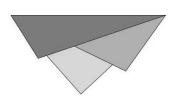
- Consumer admissions who completed ADA-supported treatment had markedly better outcomes than those who did not.
- In Fiscal Year 2006, ADA supported almost 47,000 consumers in clinical treatment, an estimated one admission for every 145 Missourians.
  - o Over the last decade, the number of consumers admitted to ADA-supported treatment has **increased** by almost 2,000 per year.
  - o Abstinence from alcohol and drugs **increased** during treatment.
  - Employment increased during treatment, so that approximately two-thirds of consumer admissions were employed at discharge.
  - o Involvement with the criminal justice system (i.e., parole, probation, incarceration, etc.) **decreased** during treatment.
  - Although approximately 70% of consumer admissions have been arrested at least once in the past year, only 2% were arrested while in treatment.
- For every admission to an ADA-supported treatment program, 24 Missourians 12+ years reported needing, but not receiving, treatment for alcohol dependence or abuse.
- For every admission to an ADA-supported treatment program, four Missourians 12+ years reported needing, but not receiving, treatment for illicit drug dependence or abuse.



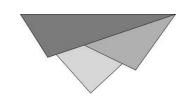


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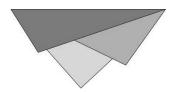




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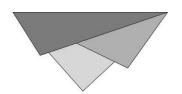


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Staff members from the Division of Alcohol and Drug Abuse (ADA) contributed to this report. Randy Smith provided much appreciated guidance on data that forms the basis of the report. Barth Ihenacho, Amy Lister and Kathleen Mims provided data on ADA treatment programs. Nora Bock provided descriptions of ADA treatment programs. Joellyn Becker provided data and descriptions for ADA prevention programs. Terry Morris, Angie Stuckenschneider, Nora Bock, Joellyn Becker and Christie Holterman reviewed and commented on earlier drafts. Ken Dowden also reviewed an earlier draft. Christie Holterman provided administrative support.

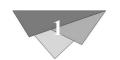




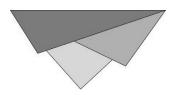
# **History of the Division of Alcohol and Drug Abuse**

Statewide substance abuse services in Missouri were first established in April 1967 when the state's mental hospitals and mental health centers were ordered to develop inpatient alcoholism treatment programs.<sup>1</sup> A separate drug abuse section was created in 1972 and until 1974 substance abuse programs were housed in the Division of Mental Diseases, later called the Division of Mental Health within the Department of Health and Welfare. The Reorganization Act of 1974 elevated the Division of Mental Health to departmental status. The Division of Alcohol and Drug Abuse (ADA) was established in the Department of Mental Health on June 19, 1975 but did not become a statutorily required division until 1980 with passage of House Bill 1724.<sup>2</sup>

Some of ADA's first major initiatives were implementing treatment program standards and decriminalizing public drunkenness. With decriminalization of public drunkenness, ADA received substantial state funding for detoxification services, allowing for programs to be established throughout the state. Meanwhile, federal funding for substance abuse services expanded, resulting in the growth of community-based treatment programs to supplement the state-operated facilities. In the 1980s, ADA developed a continuum of care model and a network of social setting detoxification centers. Later in that decade, ADA focused on developing environmental program standards, a statewide prevention program focused on school-community team training and services to family members. Also during this time, ADA funded facility upgrades for a number of community-based treatment programs. In the 1990s, the Medicaid-approved Comprehensive Substance Treatment and Rehabilitation program, community-based task forces and Community 2000 Support Centers (which support community prevention efforts) were developed and implemented. Recently, ADA has developed partnerships with the Department of Corrections, prevention services with private and charitable organizations and expanded treatment services for adolescents. ADA strives to develop a service delivery system that is easy to access, has coordinated services and more choices for consumers.



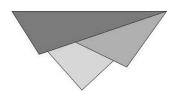
## **VISION, MISSION, AND VALUES**



The **VISION** of the Missouri Department of Mental Health (DMH), of which the Division of Alcohol and Drug Abuse is a part, is that all Missourians shall be free to live their lives and pursue their dreams beyond the limitations of mental illness, developmental disabilities and alcohol and other drug abuse.<sup>3</sup> To fulfill this vision, DMH's **MISSION** is to work side by side with individuals, families, agencies and diverse communities to establish a philosophy, policies, standards and quality outcomes for prevention, education, habilitation, rehabilitation and treatment for Missourians challenged by mental illness, substance abuse and addiction and developmental disabilities. In pursuing its mission, DMH relies on nine **VALUES**. These are:

- Full community membership
  - All people are accepted and included in the educational, employment, housing and social opportunities and choices of their communities.
- Access
  - All people can easily access coordinated and affordable services of their choice in their own communities.
- Individualized services and supports
  - All people design their own services and supports to enhance their lives and achieve their personal visions.
- Cultural diversity
  - All people are valued for and receive services that reflect and respect their race, culture and ethnicity.
- Dignity, self-worth and individual rights
  - All people are treated with respect and dignity and their rights are ensured by persons providing them with services and supports.
- Prevention and early intervention
  - All people live their lives free of, or are less affected by, mental or physical disabilities as a result of our emphasis on prevention and early intervention.
- Excellence
  - All people determine the excellence of their services and supports based on the outcomes they experience.
- Valued workers and
  - All people who provide services and supports are our organizations most important resources.
- Competence
  - All people receive services delivered by staff that are competent in dealing with culture, race, age, lifestyles, gender, sexual orientation, religious practice and ethnicity.

To this end, ADA plans and funds prevention, treatment and rehabilitation programs for substance abuse. Funding for prevention and outpatient, residential and detoxification services is directed to community-based programs that work with communities to develop and implement comprehensive coordinated plans. Additionally, ADA provides technical assistance to these agencies and operates a certification program that sets standards for treatment programs, qualified professionals and alcohol and drug related educational programs.



# **PREVENTION SERVICES**

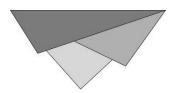
Substance abuse prevention not only averts the tragic consequences of addiction, but also allows for better use of limited resources.<sup>4,5</sup> Therefore, ADA strives to reduce the number of persons needing treatment for substance abuse through an extensive prevention effort. There are five major components of ADA's prevention system: 1) Community 2000; 2) other community-based services, formerly known as high-risk youth programs, primarily for youth but also serving other ages; 3) school-based initiatives; 4) regional support centers; 5) a statewide training and resource center; 6) Tobacco Compliance; and 7) the Strategic Prevention Framework State Incentive Grant. These components combine to create a continuum of prevention services available to all populations and all regions of the state. Other prevention activities include public education and services for the deaf and hearing impaired. Services are provided through a network of contractors that operate prevention programs and must meet state certification standards. Desired outcomes of ADA's substance abuse prevention activities include, but are not limited to:

- decreased binge drinking among college students
- increased age at first use of tobacco, alcohol, marijuana, etc.
- decreased number of youth reporting ever having used substances
- increased perception of the harm caused by substance use
- decreased societal and individual attitudes favorable to substance use and
- reduce risky drinking in the age group 12-25 years

Community 2000, initiated in 1987, is a network of volunteer community coalitions focused on reducing the incidence of substance use and abuse in their communities and changing community norms regarding substance use. Community coalitions receive technical assistance and training from regional support centers on topics related to organizational development and implementing prevention strategies. There are approximately 200 volunteer community coalitions registered with the Community 2000 program. Other community services for youths and other ages are provided by community-based not-for-profit organizations. These services, which rely on model, evidence-based programs, target individuals at high risk of early use of alcohol and other drugs.

ADA's primary school-based initiative is Missouri SPIRIT. Missouri SPIRIT's goal is to support the development and implementation of evidence-based substance abuse prevention services in all public primary and secondary schools.<sup>6</sup> Additionally, Missouri participates in the Leadership to Keep Children Alcohol Free initiative, a coalition of governors' spouses, federal agencies and public and private organizations aimed at preventing alcohol use by children aged 9-15 years.

### **PREVENTION SERVICES**

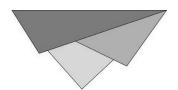


Regional support centers are the primary sources of technical assistance for Community 2000 community coalitions.<sup>4,5</sup> These centers facilitate development of coalitions capable of making changes in substance use patterns in their communities. Each center has a "mobilizer" (prevention specialist) who works with the coalitions in its area, assisting with development of coalitions and implementation of prevention strategies. As required by federal Synar regulation, it is unlawful in Missouri to sell or distribute tobacco products to anyone under 18 years of age.<sup>7</sup> The centers play a key role in educating tobacco merchants about the law.

The Statewide Training and Resource Center (STRC) provides resources, training and technical assistance for the community-based service providers and regional support centers. STRC offers multiple statewide prevention conferences and workshops throughout the year. STRC, through its consultant bank, makes resources available to the prevention community, administers the Community 2000 mini-grant program and operates the statewide RADAR resource site.

ADA's Tobacco Compliance Unit (TCU) checks tobacco merchants' compliance with legislation outlawing the sale of tobacco products to individuals less than 18 years of age. <sup>7</sup> To accomplish this, TCU staff work with 16- or 17-year-olds who attempt to purchase tobacco products, either from a clerk, over-the-counter or from a vending machine. Subsequently, TCU staff follows up with each business owner, manager or clerk regarding success or lack thereof of the minor in purchasing tobacco. The staff also presents any other pertinent findings from the compliance checks.

Beginning in October, 2006, eighteen community coalitions have been awarded contracts for up to three years by the Missouri Department of Mental Health (DMH) under the Strategic Prevention Framework State Incentive Grant (SPF SIG). DMH's priority under SPF SIG is to reduce risky (i.e., underage and binge) drinking among individuals aged 12-25 years. The contracted coalitions all have missions solely focusing on, or strongly related to, substance abuse prevention. Funds are targeted for conducting in-depth needs, resource and readiness assessments regarding DMH's priority. Assessment results will be used to build local capacity to address identified needs.



## TREATMENT SERVICES

ADA contracts with community providers for an array of substance abuse treatment and recovery services. <sup>5,8,9</sup> Treatment sites are located across the state and offer multiple levels of care to provide Missourians with ready access to services. Services include detoxification, assessment, day treatment, individual and group counseling, family therapy and community support. Residential support, the provision of 24-hour supervision and structure, is available as appropriate. In addition, family members of consumers receiving substance abuse treatment can participate in individual and codependency counseling. To promote service delivery that is necessary, appropriate, likely to benefit the consumer and provided in accordance with admission criteria and service definitions, treatment services are subject to clinical utilization review by ADA staff. The goals of treatment and recovery include abstinence from alcohol and other drugs, eliminating criminal behavior, increasing productivity at work and school, strengthening family relationships and increasing social connectedness.

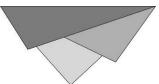
Detoxification, often the first step in recovery, helps consumers withdraw from addictive substances in a safe, supportive and closely monitored environment. A consumer's need for detoxification services is assessed at admission using physician-approved protocols. Assessment guides the consumer's placement into an appropriate level of care. Types of detoxification programs available are modified-medical and social setting. During detoxification consumers are assisted in making arrangements for further treatment.

The two major types of treatment programs are Primary Recovery Plus (PR+) and Comprehensive Substance Treatment and Rehabilitation (CSTAR). Both have three levels of care: community-based primary treatment with and without residential support, intensive inpatient rehabilitation and supported recovery. Levels of care vary in duration and intensity and consumers may enter either treatment program at any level. Treatment typically includes assessment, individual and group counseling, group education, family therapy, participation in self-help groups and other supportive measures.

Primary Recovery Plus (PR+) programs provide a continuum of care, including detoxification. By Fiscal Year 2006, existing primary treatment programs were converted to PR+ programs. ADA contracted providers either must provide a continuum of clinical services individualized to each consumer's needs or refer the consumer to a treatment program capable of providing individually-tailored care. Another benefit in adopting PR+ programming was expansion of the Clinical Utilization Review, a monitoring, consulting and training unit within ADA, thereby ensuring the best consumer care in an appropriate, efficient manner. Recovery Support programs supplement PR+ programming and may include services such as care coordination, daycare, transportation, emergency temporary housing, work preparation, etc. PR+ and Recovery Supports goals include promoting consumer choice in providers, expanding access to a comprehensive array of treatment and support options and increasing overall state substance abuse treatment capacity. Recovery Supports programs also were intended to help keep consumers engaged in treatment longer periods by addressing issues that might otherwise be barriers to treatment completion. PR+ and Recovery Support programs serve consumers without Medicaid eligibility.



## TREATMENT SERVICES

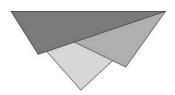


The Comprehensive Substance Treatment and Rehabilitation (CSTAR) General Population program was developed by ADA. 58.9 It provides a flexible combination of clinical services, living arrangements and support services (including extended outpatient services in the home community) that are individually tailored to each consumer. CSTAR is the only intensive substance abuse treatment in Missouri approved by Medicaid for service reimbursement. Specialized programs available under the CSTAR model are Women and Children programs, Adolescent and Opioid (formerly known as the Methadone Program). CSTAR Women and Children offers priority treatment to women who are pregnant, postpartum or who have children in their physical care and custody. Specialized services include daycare, residential support and community support for children who accompany their mothers into treatment. CSTAR Adolescent programs offer academic education to youth between 12 and 17 years of age. CSTAR Opioid programs provide outpatient services to individuals dependent on heroin, oxycontin and other narcotics. Priority admission is given to women who are pregnant and persons who are HIV positive. Specialized services include use of methadone for medically-supervised withdrawal from narcotics.

An additional resource is Oxford House. Oxford House is a network of self-run, self-supported recovery houses that provide safe, supportive and secure environments where individuals can make behavioral changes to ensure continued sobriety. Each house is chartered by Oxford House, Inc. and must abide by three basic rules: 1) anyone who relapses is evicted, 2) each house must be financially self-sufficient and 3) each house is democratically run by its members. ADA fosters the development of Oxford Houses throughout the state.

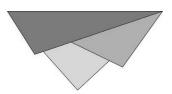
In addition to the preceding substance abuse treatment and recovery services, ADA administers the Substance Abuse Traffic Offenders Program (SATOP). This program services motorists who have had alcohol- or drug-related traffic offenses. When a motorist's driver license has been suspended or revoked due to an alcohol-related offense, participation in SATOP is legally required for license reinstatement. Also, offenders may be referred to SATOP by court order, as a condition of probation or through plea bargain. Offenders receive screening assessments, which include reviews of their driving record, blood alcohol content at times of arrest and interviews with qualified substance abuse professionals. Based on the assessments, referrals may be made to an educational program or to one of four specialized SATOP programs: Weekend Intervention Program (WIP), Clinical Intervention Program (CIP), Youth Clinical Intervention Program (YCIP) and Serious and Repeat Offender Program (SROP). Through various levels of educational and clinical services, SATOP serves more than 30,000 DWI offenders annually.

Finally, ADA administers treatment programs for compulsive gamblers and their families with funding from casino admission fees. Individuals with gambling problems and their families can receive individualized treatment along with referrals to other supportive interventions such as 12-step support groups and legal assistance. Treatment services include individual and group counseling, family therapy and individual and group co-dependency counseling. ADA also serves as the state certifying body for compulsive gambling counselors, ensuring that those counselors meet professional and continuing education requirements. ADA also partners with other stakeholders in the area of problem gambling to raise public awareness of the issue and it supports school-based prevention efforts.



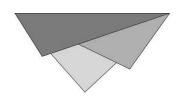
The consequences and costs of substance dependence and abuse places an enormous burden on society and addiction is the nation's number one health problem. Alcohol and illicit drug use are associated with many of this country's most serious problems, often resulting in disruptions in family, work and personal life. Nationally, over 110,000 deaths a year are related to alcohol and illicit drug use. Other problems associated with alcohol and illicit drug use are child and spousal abuse, sexually transmitted disease (including HIV infection), teen pregnancy, school failure, motor vehicle crashes, injury, escalating health care costs, low worker productivity and homelessness. Substance abuse crosses all societal boundaries, affects both sexes, every ethnic group and people in every tax bracket. Scientific documentation defines alcoholism and drug dependence as a disease that has roots in both genetic susceptibility and personal behavior. Nationally, the estimated 1995 economic costs attributable to alcohol and drug abuse exceeded \$275 billion, or approximately \$1,000 for every man, woman and child in the United States.

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking is a major risk factor for heart disease, stroke, lung cancer and chronic lung diseases. Smoking during pregnancy may result in miscarriage, premature delivery, or sudden infant death syndrome. Environmental tobacco smoke increases the risk of heart disease and significant lung conditions, especially asthma and bronchitis in children. Importantly, there is no safe tobacco alternative to cigarettes. Cigar smoking causes cancer of the mouth, throat and lungs and can increase the risk of heart disease and chronic lung problems. Smokeless tobacco causes cancer of the mouth, inflammation of the gums and tooth loss. Nationally, tobacco-related deaths number more than 430,000 annually, representing more than 5 million years of potential life lost. Medical costs attributable to smoking total at least \$50 billion per year.



Alcohol use is very common in the United States.<sup>12</sup> Excessive drinking, either heavy drinking or binge drinking, can lead to alcohol dependence. Excessive drinking has been associated with numerous health problems (such as liver cirrhosis, pancreatitis, various cancers, high blood pressure and psychological disorders), unintentional injuries (such as motor-vehicle traffic crashes, falls, drowning, burns and firearm injuries) and violence (such as child maltreatment, homicide and suicide). Among modifiable behaviors, excessive alcohol use is the 3<sup>rd</sup> leading cause of death. Importantly, a developing fetus may be harmed if a woman drinks while pregnant.

Alcohol is the most commonly used and abused drug among youth.<sup>13</sup> Youth who drink alcohol are more likely to experience – among other things – school problems (such as poor or failing grades), social problems (such as fighting), legal problems, risky sexual activity, physical and sexual assault, a higher risk for suicide and homicide and abuse of other drugs. Additionally, youth who start drinking before age 15 are five times more likely to develop alcohol dependence or abuse later in life than those who begin drinking at or after age 21.



## **Alcohol: Past Month Consumption**

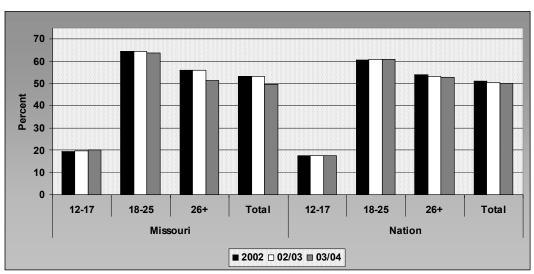


FIGURE 1. Missouri and Nation – Estimated Percent by Age Who Reported Use of Alcohol in the Past Month: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

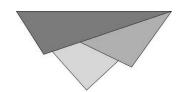
Approximately one in every six current drinkers meets diagnostic criteria for alcohol dependence or abuse. Among adolescents who start drinking at 14 years or less, an estimated 40% will become alcohol-dependent at some point in life. Among adults who start drinking at or after the legal age of 21 years, approximately 10% will become alcohol-dependent at some point.

According to pooled 2003 and 2004 data, approximately half of Missourians 12+ years reported consuming any alcohol in the past month (Figure 1). Although relatively high among older adults 26+ years, past-month consumption was highest among young adults 18-25 years. The 2003/04 prevalence for adolescents 12-17 years who did not use alcohol in the past month (79.8%) was approximately nine percentage points short of the Healthy People 2010 target of 89% {See Goal 26-10a listed in Table 9}.

From 2002 to 2004, Missouri's prevalence of past-month consumption decreased on average by 3.2% per year. This decrease was primarily due to reduced consumption among older adults. Missouri's average annual decrease over the 2002-2004 time was greater than that observed nationally (-0.8%).

The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) has identified multiple National Outcome Measures (NOMs) for SAMHSA-funded prevention and treatment services. States receiving SAMHSA funding will be required to report some of the NOMs during Fiscal Year 2007. Although not required to report at this time, Missouri's average annual decrease in the prevalence of past-month consumption of alcohol was consistent with the prevention NOM for reducing morbidity through decreasing substance use.

# **Alcohol: Heavy Drinking**



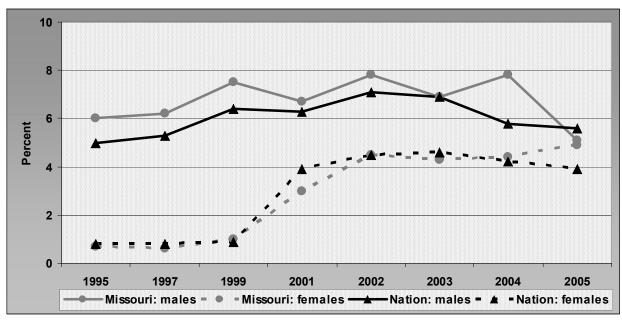
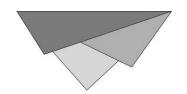


FIGURE 2. Missouri and Nation – Estimated Percent of Adults by Gender aged 18+ Who Reported Heavy Drinking: 1995-2005. [SOURCE: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Long-term heavy drinking increases the risk for cirrhosis and other liver disorders, high blood pressure, heart rhythm irregularities, heart muscle disorders, stroke, certain forms of cancer and worsened the outcomes for patients with hepatitis  $C^{14,15}$ 

Heavy drinking is defined for a man as having more than two drinks per day or for a woman as having more than one drink daily. In 2005, one in every 20 adult Missourians 18+ years reported being a heavy drinker (Figure 2).

From 1995 to 2005, Missouri's prevalence of heavy drinking among males slightly decreased on average by 0.4% per year. However, heavy drinking among females had an average annual increase of 44.5%. By national comparison, males and females had 2.2% and 49.7% average annual increases, respectively.



# **Alcohol: Past Month Binge Drinking**

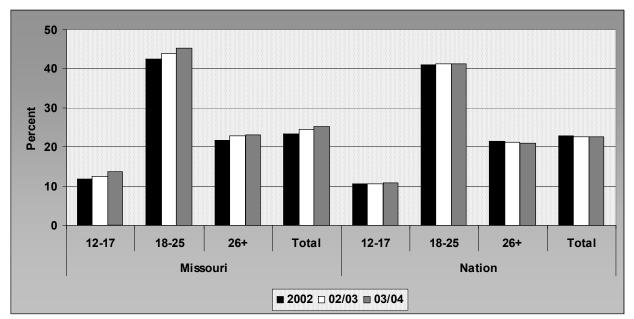


FIGURE 3. Missouri and Nation – Estimated Percent by Age Who Reported Binge Drinking in the Past Month: 2002-2004.

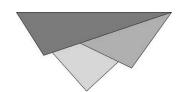
[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

Binge drinking is defined as consuming five or more drinks on one or more occasions. Among other health problems, binge drinking is associated with injuries, alcohol poisoning, sexually-transmitted diseases and unintended pregnancy.<sup>17</sup>

From 2003 and 2004 data, approximately one-quarter of Missourians 12+ years (an estimated 1,230,000 people) reported engaging in binge drinking in the past month (Figure 3). As with past-month consumption, the prevalence of binge drinking was highest among young adults 18-25 years. The 2003/04 prevalence for adolescents 12-17 years reporting binge drinking in the past month (13.7%) was almost 12 percentage points above the Healthy People 2010 target of 2% {See Goal 26-11d listed in Table 9}. Likewise, prevalences of binge drinking among young adults (45.2%) and older adults 26+ years (23.1%) were approximately 39 and 17 percentage points over the Healthy People 2010 target of 6% {See Goal 26-11c listed in Table 9}.

From 2002 to 2004, Missouri's prevalence of binge drinking increased on average by 3.6% per year. During this time the greatest increase in binge drinking occurred among adolescents (+7.7%). In contrast, the national prevalence of binge drinking had a slight average annual decrease of 0.4%.

# Alcohol: Perception of Risk



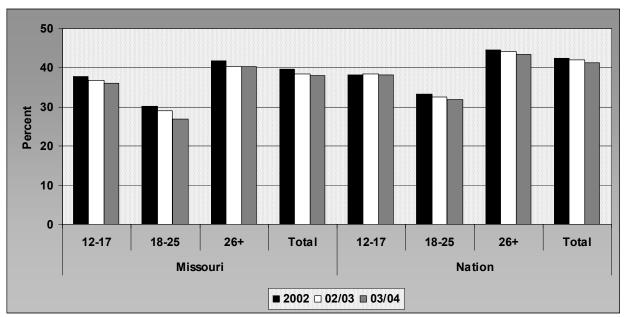
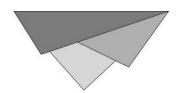


FIGURE 4. Missouri and Nation – Estimated Percent by Age Who Perceived Great Risk in Consuming Five or More Alcoholic Drinks on a Single Occasion Once or Twice a Week: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, almost two-fifths of Missourians 12+ years perceived a great risk in consuming five or more alcoholic drinks on a single occasion once or twice a week (Figure 4). Young adults 18-25 years were least likely to perceive this risk. The 2003/04 prevalence for adolescents 12-17 years who perceived this risk (36.1%) was approximately 44 percentage points below the Healthy People 2010 target of 80% {See Goal 26-17a listed in Table 9}.

From 2002 to 2004, Missouri's prevalence of perceived great risk in consuming five or more alcoholic drinks on a single occasion once or twice a week decreased on average by 2.1% per year. Young adults had the highest average annual decrease (-5.4%). Missouri's average annual decrease over this time was slightly greater than the national decrease (-1.2%).



# **Alcohol: Drinking While Riding/Driving**

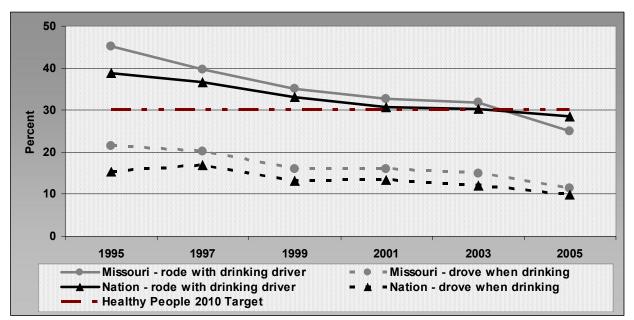


FIGURE 5. Missouri and Nation – Estimated Percent of High School Students Who Reported
Riding with Someone Who Had Been Drinking or Driving when Drinking on One or More Occasions in the Past 30 Days: 1995-2005.

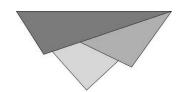
[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Drinking even relatively small amounts of alcoholic beverages may contribute to motor vehicle crashes, injuries and death. <sup>14</sup> Nationally, alcohol use was associated with two-fifths of motor vehicle crash fatalities in 1998.

In 2005, approximately one-quarter of Missouri high school students reported in the past month riding with a driver who had been drinking, while slightly more than one-tenth reported driving while drinking (Figure 5). The 2005 prevalence of riding with a driver who had been drinking (25.0%) was five percentage points below the Healthy People 2010 target {See Goal 26-6 listed in Table 9}. <sup>15</sup>

From 1995 to 2005, the prevalence of riding in the past month with a driver who had been drinking among Missouri high school students decreased on average by 11.0% per year. During this same time, the prevalence of driving while drinking decreased on average by 11.3% per year. Missouri's average annual decrease for these risky behaviors over this time was greater than those observed nationally (-5.9% and -7.7% respectively).

# Alcohol: Availability, Procurement and Per Capita Consumption of Alcohol



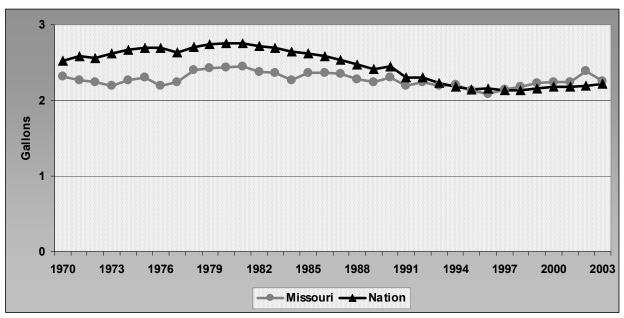
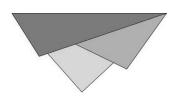


FIGURE 6. Missouri and Nation – Estimated Per Capita Ethanol Consumption by Individuals 14+ Years: 1970-2003. [SOURCE: Apparent Per Capita Alcohol Consumption: National, State and Regional Trends, 1977-2003. August 2005. National Institute on Alcohol Abuse and Alcoholism.]

Nationally, in 2005 approximately 60% of eighth graders, 85% of sophomores and 95% of seniors reported that it would be "fairly easy" or "very easy" for them to procure alcohol. In Fiscal Year 2006 alcohol sales in Missouri generated approximately \$29.5 million in state excise taxes, a 4.2% increase from the previous fiscal year. In Fiscal Year 2006 alcohol sales in Missouri generated approximately \$29.5 million in state excise taxes, a 4.2% increase from the previous fiscal year.

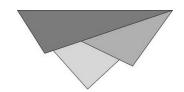
In calendar year 2003, each Missourian 14 and older consumed an estimated 2.26 gallons of ethanol from alcoholic beverages (Figure 6).<sup>20</sup> This estimate was one-quarter gallon more than the Healthy People 2010 target of 2.0 gallons {See Goal 26-12 listed in Table 9}.<sup>15</sup> From 1970 to 2003, Missouri's per capita consumption of ethanol remained virtually unchanged while national consumption had a slight average annual decrease (-0.4%).



Marijuana is the most commonly abused illicit drug in the United States.<sup>21,22</sup> The main active chemical in marijuana is delta-9-tetrahydrocannabinol, or THC. Short-term effects of marijuana use may include problems with memory and learning, distorted perception, difficulty in thinking and problem solving, loss of coordination and increased heart rate. Smoking marijuana has the potential to promote lung and other respiratory tract cancers. Additionally, smoking marijuana may lead to adverse health effects, as THC impairs the immune system's ability to fight disease. Babies born to women who abused marijuana during pregnancy exhibit characteristics suggestive of developmental neurological problems and in (pre)school these children are more likely to exhibit deficits in problem-solving skills, memory and attentiveness.

Long-term marijuana abuse can end in addiction, interfering with family, school, work and recreational activities.<sup>22</sup> Chronic marijuana use has been associated with depression, anxiety and personality disturbances and may lead to falling behind in accumulating intellectual, job, or social skills. Students who smoke marijuana tend to earn lower grades and are less likely to graduate from high school, while workers who smoke marijuana are more likely to have problems on the job, such as increased absences, tardiness, accidents, workers' compensation claims and job turnover.

Marijuana: Past Month Use



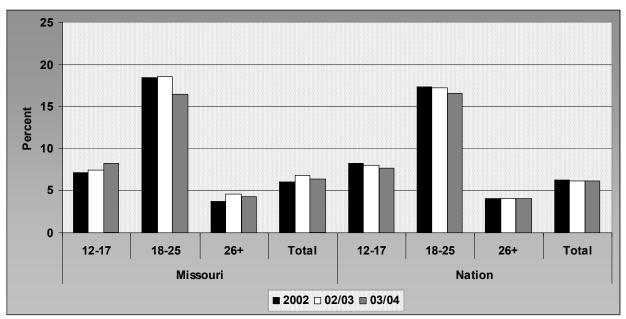


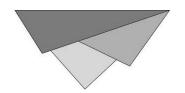
FIGURE 7. Missouri and Nation – Estimated Percent by Age Who Reported Use of Marijuana in the Past Month: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

For some people long-term marijuana use ends in addiction.<sup>23</sup> Cravings and other withdrawal symptoms such as irritability and anxiety can make it difficult for long-term marijuana smokers to stop using the drug.

According to pooled 2003 and 2004 data, approximately one in twenty Missourians 12+ years reported using marijuana or hashish in the past year (Figure 7). The 2003/04 prevalence of marijuana use was highest among young adults 18-25 years, approximately twice that of adolescents 12-17 years and four-times that of older adults 26+ years. For adolescents the prevalence of marijuana use in the past month (8.2%) was over seven percentage points above the Healthy People 2010 target of 0.7% {See Goal 26-10b listed in Table 9}.

From 2002 to 2004, Missouri's prevalence of past-month use increased on average by 3.0% per year. However, young adults had an average annual decrease of 5.4% in the prevalence of past-month use. In contrast, the national prevalence of past-month use had a slight average annual decrease over this time (-0.7%).



Marijuana: Past Year Use

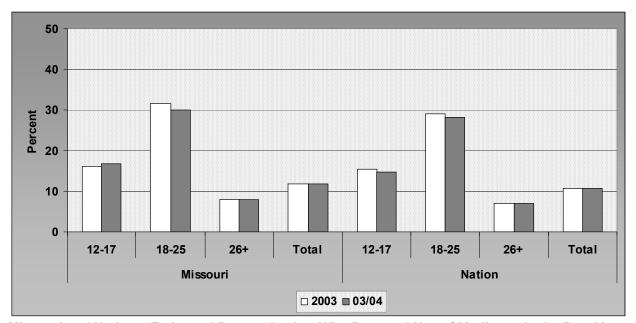
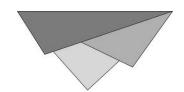


FIGURE 8. Missouri and Nation – Estimated Percent by Age Who Reported Use of Marijuana in the Past Year: 2003-2004. [SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, more than one-tenth of Missourians 12+ years reported using marijuana in the past year (11.9%) (Figure 8). The 2003/04 prevalence of marijuana use was highest among young adults 18-25 years (30.0%), approximately twice that of adolescents 12-17 years (16.7%) and four-times that of older adults 26+ years (8.0%).

From 2003 to 2004, Missouri's prevalence of past year use slightly increased on average by 0.2% per year. As with past-month marijuana use, young adults had an average annual decrease (-4.8%) in the prevalence of past year use. In contrast, the national prevalence of past year use had an average annual decrease over this time of 1.7%.

# Marijuana: Average Annual Rate of New Users



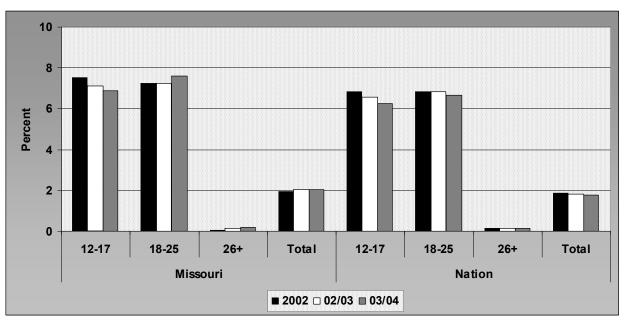
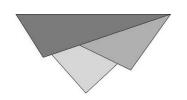


FIGURE 9. Missouri and Nation – Estimated Percent by Age Who Reported Using Marijuana for the First Time in the Past Year: 2002-2004. [SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

Marijuana use at an early age can increase the likelihood of a lifetime of drug problems, especially among teenagers who have prior serious antisocial problems.<sup>23,24</sup> Young teens may start smoking marijuana because they see older siblings using it, because of peer pressure, or to help them escape problems at home, at school or with friends.<sup>25</sup>

According to pooled 2003 and 2004 data, approximately 2% of Missourians 12+ years (an estimated 98,000 people) reported using marijuana for the first time in the past year (Figure 9). The 2003/04 prevalence of first-time marijuana use was highest among adolescents 12-17 years (6.9%) and young adults 18-25 years (7.6%).

From 2002 to 2004, Missouri's overall prevalence of first-time marijuana use in the past year increased on average by 1.8% per year. However, adolescents had an average annual decrease (-4.1%) in the prevalence of first-time marijuana use in the past year. In contrast to Missouri's overall prevalence, the national prevalence of first-time marijuana use in the past year had an average annual decrease over this time (-2.2%).



# Marijuana: Perception of Risk

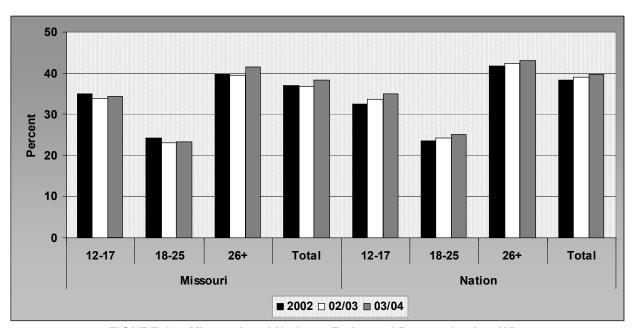


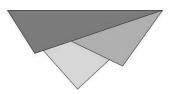
FIGURE 10. Missouri and Nation – Estimated Percent by Age Who Perceived Great Risk from Smoking Marijuana Once per Month: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

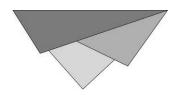
According to pooled 2003 and 2004 data, almost two-fifths of Missourians 12+ years perceived great risk from smoking marijuana once per month (Figure 10). As with alcohol, young adults 18-25 years were least likely to perceive a risk in smoking marijuana. The 2003/04 prevalence for adolescents 12-17 years who perceived this risk (34.2%) was less than half the Healthy People 2010 target of 80% {See Goal 26-17b listed in Table 9}.

From 2002 to 2004, Missouri's prevalence of perceived great risk from smoking marijuana once per month increased on average by 1.6% per year. However, that prevalence had an average annual decrease among adolescents (-1.1%) and young adults (-1.9%). Missouri's average annual increase was similar to that observed nationally (+1.8%).

Although not required to report at this time, Missouri's average annual increase in the prevalence of perceived great risk from smoking marijuana was consistent with SAMHSA's prevention NOM for reducing morbidity by increasing the perceived harm associated with substance use.<sup>16</sup>



Cocaine is a powerfully addictive stimulant, the use of which may result in cardiac arrest or seizure followed by respiratory arrest leading to sudden death. Full-blown paranoid psychosis, in which the user loses touch with reality and experiences auditory hallucinations, may result from "binging" on cocaine. Other complications include disturbances in heart rhythm and heart attacks, chest pain and respiratory failure, strokes, seizures and headaches and gastrointestinal complications such as abdominal pain and nausea. Chronic users can become malnourished. Snorting cocaine can lead to loss of the sense of smell, nosebleeds and problems with swallowing; while ingesting cocaine can cause severe bowel gangrene.



## **Cocaine: Past Month Use**

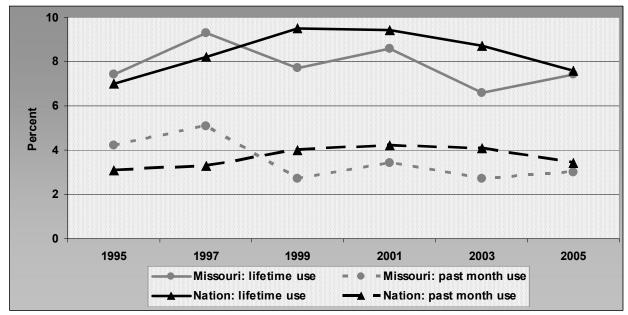


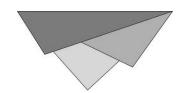
FIGURE 11. Missouri and Nation – Estimated Percent of High School Students Who Reported Using Any Form of Cocaine in the Past 30 Days or Ever Using Any Form of Cocaine: 1995-2005.

[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

In 2005, approximately one in 33 Missouri high school students reported having used cocaine in the past month (Figure 11). From 1995 to 2005, the prevalence of past-month use among Missouri high school students decreased on average by 1.8% per year. In contrast, the national prevalence had an average annual increase of 2.6%.

In 2005, approximately one in 14 Missouri high school students reported ever having used cocaine. From 1995 to 2005, the prevalence of lifetime use among Missouri high school students fluctuated, ranging between 6.6% and 9.3%, while the national prevalence exhibited an average annual increase of 16.5% from 1995 to 1999 before decreasing by an average of 7.0% per year from 1999 to 2005.

**Cocaine: Past Year Use** 



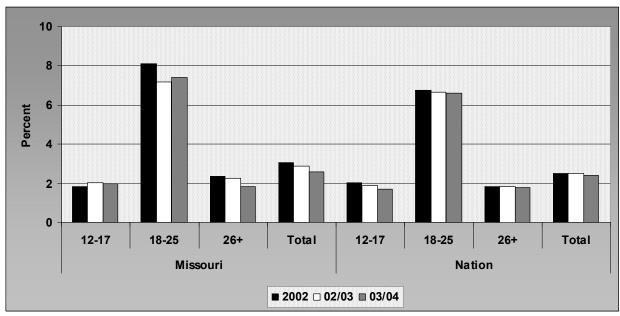
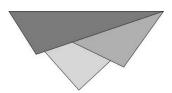


FIGURE 12. Missouri and Nation – Estimated Percent by Age Who Reported Use of Cocaine in the Past Year: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

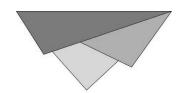
According to pooled 2003 and 2004 data, approximately one in 38 Missourians 12+ years reported using cocaine in the past year. The prevalence of past-year use was almost four times higher among young adults 18-25 years than the other age groups (Figure 12).

From 2002 to 2004, Missouri's prevalence of past-year cocaine use decreased on average by 7.9% per year. In contrast to decreased past-month use among only high school students, all adolescents 12-17 years had an average annual increase in past-year cocaine use (+4.8%). Combined, these data may suggest either infrequent cocaine use or a recent trend towards quitting cocaine. Missouri's average annual decrease over this time was over four times greater than that observed nationally (-1.8%).



Amphetamines are central nervous system stimulants and used in the treatment of certain conditions, such as attention deficit hyperactivity disorder, depression and narcolepsy.<sup>28</sup> Possible side effects are sweating, headache, blurred vision, dizziness, sleeplessness and anxiety. Amphetamines are also abused illegally as a stimulant, the temporary effects of which may include alertness, increased energy, suppressed appetite and feelings of well-being. However, extremely high doses can cause rapid or irregular heartbeat, tremors, loss of coordination and even physical collapse, while chronic users may experience many longer-term effects, such as severe anxiety, malnutrition, chronic sleeplessness, high blood pressure, skin rash and increased susceptibility to disease. Using a large amount of amphetamines over a long period may result in amphetamine psychosis, which is characterized by hallucinations, delusions and paranoia. When injected, amphetamines create a sudden increase in blood pressure that can result in stroke or heart failure. Because amphetamines impact the cardiovascular and body temperature regulating systems, use during physical exertion appears to increase the risk of amphetamine-associated death.

# **Amphetamines: Methamphetamines**



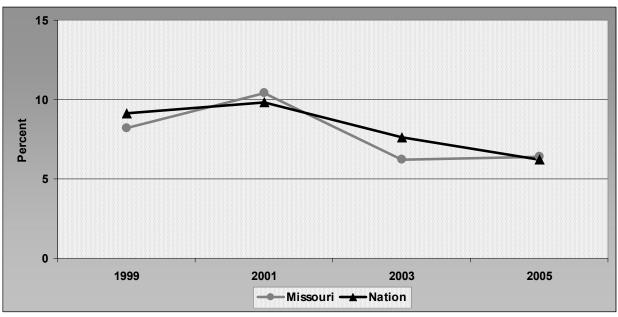
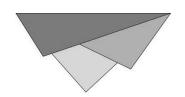


FIGURE 13. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Using Methamphetamine: 1999-2005. [SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Methamphetamine, chemically related to amphetamine, is an addictive stimulant with a high potential for abuse and addiction. Methamphetamine causes increased heart rate and blood pressure and can cause irreversible damage to blood vessels in the brain, thereby producing strokes. Other effects include irritability, insomnia, confusion, tremors, convulsions, anxiety, paranoia, aggressiveness, respiratory problems, irregular heartbeat and extreme anorexia. Use can result in cardiovascular collapse and death.

In 2005, approximately one in 16 Missouri high school students reported ever having used methamphetamine (Figure 13). From 1999 to 2005, the prevalence of high school students ever having used methamphetamine decreased on average by 3.4% per year. Missouri's average annual decrease over this time was approximately three times less than that observed nationally (-11.1%).



## **Amphetamines: MDMA/Ecstasy**

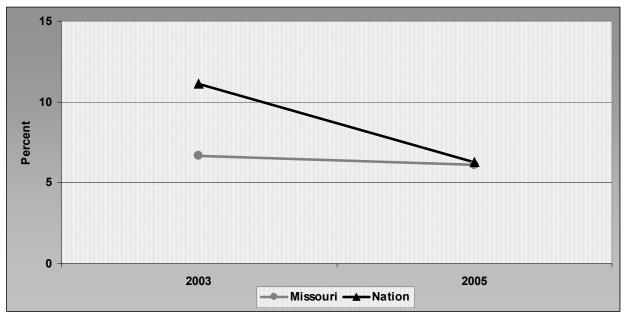
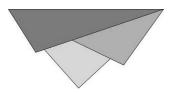


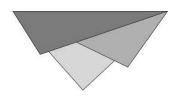
FIGURE 14. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Using MDMA/Ecstasy: 2003-2005. [SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

MDMA/ecstasy is a synthetic, psychoactive drug chemically similar to methamphetamine and the hallucinogen mescaline. MDMA can be addictive, its use causing fatigue, loss of appetite, depressed feelings and trouble concentrating. In high doses MDMA use may lead to a sharp increase in body temperature, resulting in liver, kidney and cardiovascular system failure and even death. Other possible effects include increased heart rate and blood pressure, nausea, blurred vision, faintness, sleep problems and severe anxiety.

In 2005, approximately one in 16 Missouri high school students reported ever having used ecstasy (Figure 14). From 2003 to 2005, the prevalence of ecstasy use among Missouri high school students decreased by 9.0%. The national prevalence of ecstasy use, which was almost twice as high as Missouri's in 2003, decreased by 43.2%.



Heroin is processed from morphine, a naturally occurring substance extracted from the seedpod of the Asian poppy plant. Heroin abuse is associated with fatal overdose, spontaneous abortion, collapsed veins and infectious diseases (including HIV/AIDS and hepatitis) in injecting users. Chronic users may develop collapsed veins, infection of the heart lining and valves, abscesses, cellulitis, liver disease and pneumonia. Heroin abuse during pregnancy has been associated with low birth weight, an important risk factor for later developmental delay.



Heroin: Lifetime Use

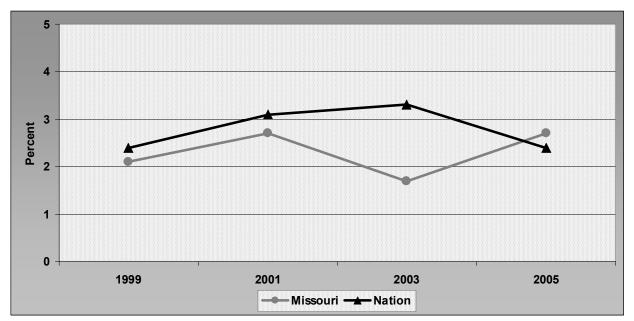
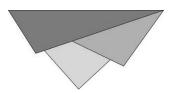
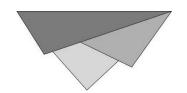


FIGURE 15. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Using Heroin: 1999-2005. [SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

In 2005, approximately one in 37 Missouri high school students, less than 5%, reported ever having used heroin (Figure 15). From 1999 to 2005, lifetime heroin use among Missouri high school students appears to have slightly increased with an annual prevalence ranging from 1.7% to 2.7%. During the same time, the national prevalence ranged from 2.4% to 3.3%.



Substance abuse and related problems are among society's most pervasive health and social concerns.<sup>15</sup> Although there has been a long-term decline in use, approximately 6% of the national population reported illicit drug use. A substantial number of frequent users of illicit drugs have a co-occurring chronic mental health disorder, while individuals addicted to illicit drugs often engage in self-destructive and criminal behavior. Illicit drug use has been associated with injury, illness, disability and death as well as domestic violence and lost workplace productivity. Illicit drug users and those with whom they have sexual contact run a high risk of contracting gonorrhea, syphilis, hepatitis, tuberculosis and human immunodeficiency virus. Drug dependence is a chronic, relapsing disorder with potential long-term consequences of chronic depression, sexual dysfunction and psychosis. The stigma attached to substance abuse may increase the severity of the problem by preventing individuals with substance abuse problems from seeking and continuing treatment and also from having a productive attitude toward treatment. Compounding this problem is the gap between the number of available treatment slots and the number of individuals seeking treatment.



## Illicit Drugs (Including Marijuana): Past Month Use

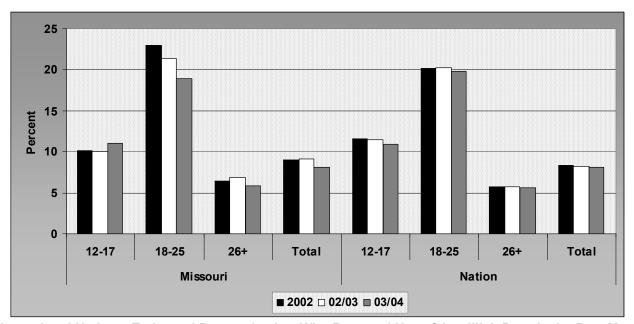


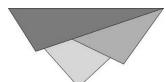
FIGURE 16. Missouri and Nation – Estimated Percent by Age Who Reported Use of Any Illicit Drug in the Past Month: 2002-2004. [SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, approximately one in 12 Missourians 12+ years reported any illicit drug use in the past month (Figure 16). The prevalence of any illicit drug use was highest among young adults 18-25 years (18.9%), followed by adolescents 12-17 years (11.0%) and then by older adults 26+ years (5.8%). The 2003/04 prevalence of no illicit drug use in the past month among adolescents met the Healthy People 2010 target of 89% {See Goal 26-10a listed in Table 9}. However, the prevalence of illicit drug use in the past month among young adults and older adults exceeded the Healthy People 2010 target of 2% {See Goal 26-10c listed in Table 9} by approximately 17 and four percentage points, respectively.

From 2002 to 2004, Missouri's prevalence of past-month use of any illicit drug decreased on average by 5.0% per year. However, adolescents had an average annual increase (+4.1%) in past-month illicit drug use. Missouri's average annual decrease over this time was greater than that observed nationally (-1.5%).

Although not required to report at this time, Missouri's overall average annual decrease in the prevalence of past-month use of any illicit drug was consistent with SAMHSA's prevention NOM for reducing morbidity through decreased substance use. 16

## Illicit Drugs (Excluding Marijuana): Past Month Use



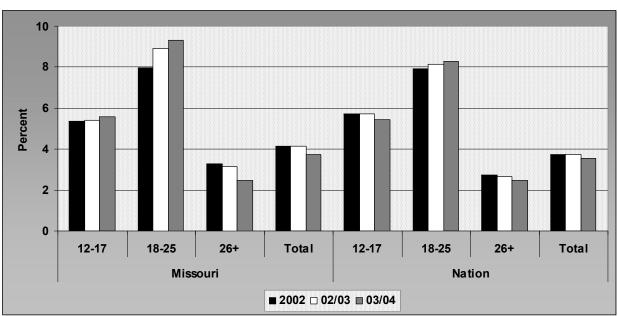


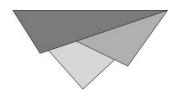
FIGURE 17. Missouri and Nation – Estimated Percent by Age Who Reported Use of Any Illicit Drug except Marijuana in the Past Month: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, approximately one in 26 Missourians 12+ years reported use of an illicit drug other than marijuana in the past month (Figure 17). As with the prevalence of any illicit drug use, the prevalence of illicit drug use other than marijuana was highest among young adults 18-25 years (9.3%), followed by adolescents 12-17 years (5.6%) and then by older adults 26+ years (2.5%).

From 2002 to 2004, Missouri's prevalence of use of an illicit drug other than marijuana decreased on average by 4.6% per year. However, both adolescents and young adults had an average annual increase in illicit drug use other than marijuana (+2.3% and +8.1% respectively). These data suggest that illicit drugs other than marijuana are becoming increasingly popular among adolescents and young adults. Missouri's average annual decrease over this time was greater than that observed nationally (-2.0%).

Although not required to report at this time, Missouri's average annual decrease in the prevalence of past-month use of any illicit drug except marijuana was consistent with SAMHSA's prevention NOM for reducing morbidity through decreased substance use.<sup>16</sup>



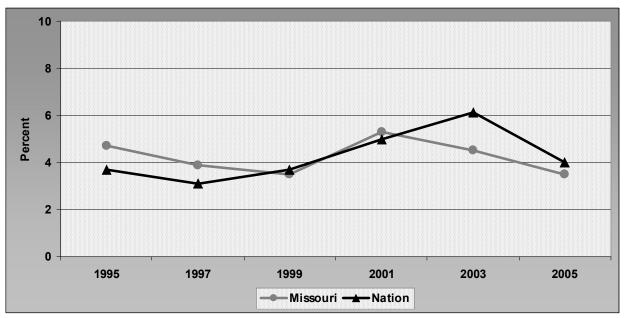
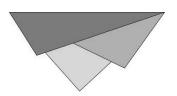


FIGURE 18. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Using Steroids: 1995-2005. [SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Anabolic-androgenic steroids are man-made substances related to male sex hormones.<sup>37</sup> Abuse of anabolic steroids can lead to serious health problems, some irreversible. These problems include cancer, jaundice, fluid retention, high blood pressure, severe acne, trembling and extreme mood swings and violence. In adolescents steroid use may lead to a premature halt in growth. In men steroid use may cause shrinking of the testicles, reduced sperm count, development of breasts and an increased risk for prostate cancer. In women steroid use may cause growth of facial hair, male-pattern baldness, changes in or cessation of the menstrual cycle, enlargement of the clitoris and deepened voice.

In 2005, approximately one in 29 Missouri high school students reported ever having used steroids (Figure 18). From 1995 to 2005, the prevalence of steroid use among Missouri high school students decreased on average by 2.6% per year. In contrast, the national prevalence of lifetime steroid use had an average annual increase of 5.2%.



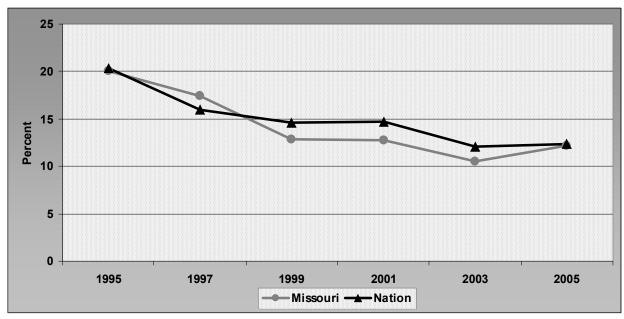
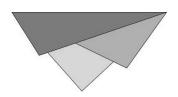


FIGURE 19. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Using Inhalants: 1995-2005. [SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Inhalants are breathable chemical vapors that produce psychoactive effects. Inhalants include spray paints, glues and cleaning fluids. Since young children and adolescents can easily obtain inhalants, they are among the most likely abusers. Sniffing highly concentrated amounts of the chemicals can result in loss of consciousness, heart failure and death, or suffocation. Chronic abuse can cause severe long-term damage to the brain, liver and kidneys.

In 2005, approximately one in eight Missouri high school students reported ever having used inhalants (Figure 19). From 1995 to 2005, the prevalence of inhalant use among Missouri high school students decreased on average by 8.3% per year, which was almost identical to the average annual national decrease (-8.9%).



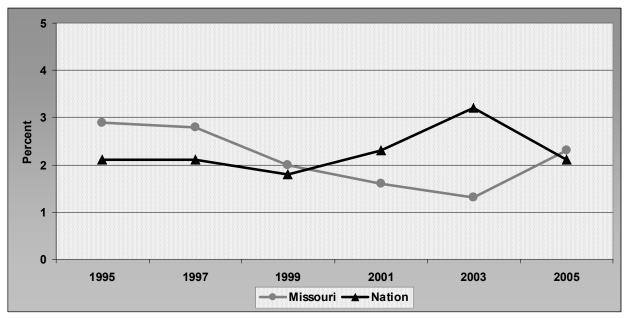


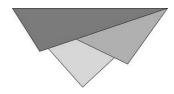
FIGURE 20. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Using a Needle to Inject Illegal Drugs: 1999-2005.

[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

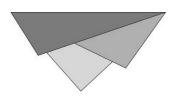
Sharing needles while injecting illegal drugs contributes to transmission of blood borne infections such as HIV, Hepatitis B and C and bacterial infections. Approximately one-third of AIDS cases and one-half of new Hepatitis C cases are associated with injection drug use. Intravenous drug use may result in fatal drug overdoses. IV drug users also typically have higher rates of suicide.

In 2005, approximately one in 43 Missouri high school students, less than 5%, reported ever having used a needle to inject illegal drugs (Figure 20). From 1995 to 2005, the prevalence of drug injection among Missouri high school students ranged from 1.3% to 2.9%, but appears to have generally decreased. During the same time, the beginning and ending national prevalence (i.e., 2.1%) remained unchanged.

# **Illicit Drugs: Availability and Procurement**



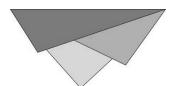
Nationally, in 2005 approximately 40% of eighth graders, 75% of sophomores and 90% of seniors reported that it would be "fairly easy" or "very easy" for them to procure marijuana; while approximately 45% of seniors reported it would be "fairly easy" or "very easy" to procure cocaine. Additionally, approximately 20% of eighth graders, 35% of sophomores and 50% of seniors reported that it would be "fairly easy" or "very easy" for them to procure amphetamines.



Through the use of cigarettes, cigars and chewing tobacco, nicotine is one of the most heavily used addictive drugs in the United States. Tobacco use is the single most avoidable cause of disease, disability and death in the United States. Individuals who smoke cigarettes have an increased risk of lung cancer, emphysema and bronchial disorders. Pregnant women who smoke cigarettes run an increased risk of having stillborn or premature infants or infants with low birth weight.

Missourians spend an estimated \$2.13 billion annually treating smoking-related illness, approximately \$510 million of which is paid for by state Medicaid.<sup>43</sup> Each year Missouri tobacco use results in an estimated 132,000 years of life lost (due to premature death) and \$2.42 billion loss in productivity.

#### **Tobacco: Past Month Use**



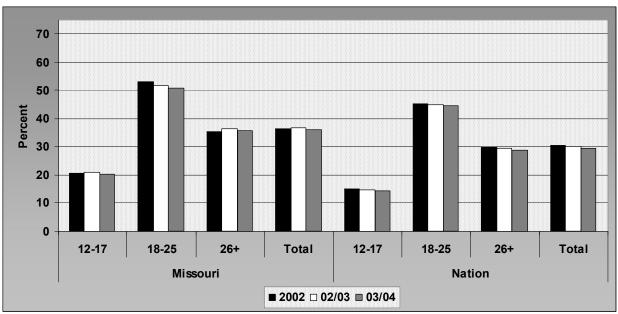


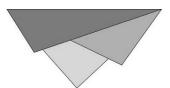
FIGURE 21. Missouri and Nation – Estimated Percent by Age Who Reported Use of Any Type of Tobacco in the Past Month: 2002-2004. [SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

Overwhelming evidence indicates nicotine found in tobacco is addictive.<sup>44</sup> Tobacco use and addiction, which usually begins in adolescence, may increase the likelihood that adolescents will use other drugs.

According to pooled 2003 and 2004 data, over one-third of Missourians 12+ years reported using any type of tobacco in the past month (Figure 21). Although relatively high among older adults 26+ years, past-month use was highest among young adults 18-25 years. The 2003/04 prevalence among adolescents 12-17 years for past-month use (20.3%) was generally the same as the Healthy People 2010 target of 21% {See Goal 27-2a listed in Table 9}.

From 2002 to 2004, Missouri's prevalence of past-month use of any tobacco slightly decreased on average by 0.2% per year. However, older adults had a slight average annual increase (+0.3%) in the prevalence of past-month use of any tobacco. Missouri's average annual decrease over this time was less than that observed nationally (-1.5%).

Although not required to report at this time, Missouri's slight average annual decrease in the prevalence of past-month use of any tobacco product was consistent with SAMHSA's prevention NOM for reducing morbidity through decreased substance use.<sup>16</sup>



#### **Tobacco: Cigarettes - Past Month Use**

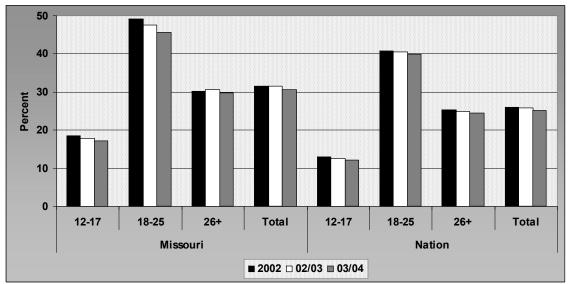


FIGURE 22. Missouri and Nation – Estimated Percent by Age Who Reported Smoking Cigarettes in the Past Month: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

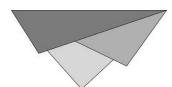
The prevalence of smoking is higher than the national average among Missouri's middle school students, high school students and adults. Exposure to secondhand smoke – typically in homes, vehicles and workplaces – has been associated with heart disease, lung cancer, sudden infant death syndrome (SIDS), acute respiratory infections, ear problems and more frequent and severe asthma attacks in children. The control of the cont

According to pooled 2003 and 2004 data, almost one-third of Missourians 12+ years reported smoking cigarettes in the past month (Figure 22). Almost one-half of young adults 18-25 years (45.5%) reported past-month smoking in 2003/04. The 2003/04 prevalence of past-month smoking among adolescents 12-17 years (17.1%) was only slightly higher than the Healthy People 2010 target of 16% (See Goal 27-2b listed in Table 9). In contrast, the 2003/04 prevalence of past-month smoking among young adults (45.5%) and older adults 26+ years (29.8%) were markedly higher (approximately 34 and 18 percentage points respectively) than the Healthy People 2010 target of 12% (See Goal 27-1a listed in Table 9).

From 2002 to 2004, Missouri's prevalence of past-month smoking decreased on average by 1.4% per year. Missouri's average annual decrease over this time was similar to that observed nationally (-1.6%).

Although not required to report at this time, Missouri's average annual decrease in the prevalence of past-month cigarette smoking was consistent with SAMHSA's prevention NOM for reducing morbidity through decreased substance use. <sup>16</sup>

## **Tobacco: Cigarettes – Initiation of Use**



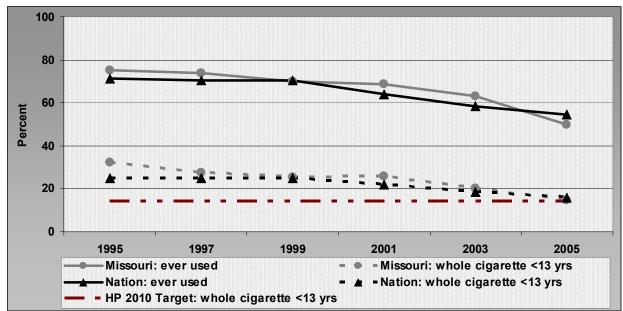


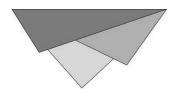
FIGURE 23. Missouri and Nation – Estimated Percent of High School Students Who Reported Ever Trying Cigarettes and Smoking a Whole Cigarette Before Age 13: 1995-2005.

[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Almost all first time tobacco use occurs before high school graduation, suggesting that if adolescents can be kept tobacco-free most will never start using tobacco.<sup>46</sup> Tobacco is often the first drug used by young people who also use alcohol, marijuana and other drugs.

In 2005, one-half of Missouri high school students reported ever trying cigarettes, if only a few puffs (Figure 23). From 1995 to 2005, the prevalence of trying cigarettes among Missouri high school students decreased on average by -7.6% per year, which was better than the average annual national decrease (-5.2%).

In 2005, approximately one in seven Missouri high school students reported smoking a whole cigarette for the first time before age 13 (Figure 23). The 2005 prevalence of high school students smoking before age 13 (14.8%) was generally the same as the Healthy People 2010 target of 14% {See Goal 27-4a listed in Table 9}. From 1995 to 2005, the prevalence of smoking a cigarette before age 13 among Missouri high school students decreased on average by 13.8% per year, which was better than the average annual national decrease (-8.2%).



# **Tobacco: Cigars - Past Month Use**

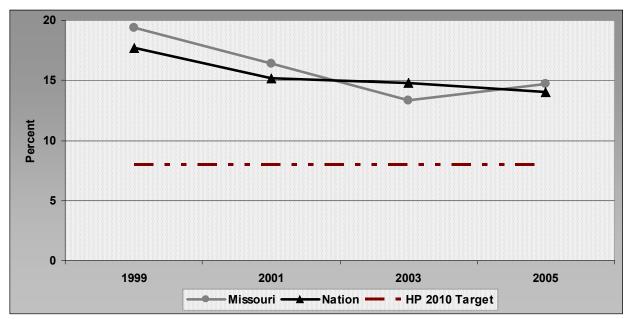
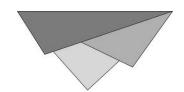


FIGURE 24. Missouri and Nation – Estimated Percent of High School Students Who Reported Smoking Cigars in the Past Month: 1999-2005. [SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

In 2005, approximately one in seven Missouri high school students reported smoking cigars in the past month (Figure 26). The 2005 prevalence of past-month cigar use among high school students (14.7%) was approximately seven percentage points above the Healthy People 2010 target of 8% (See Goal 27-2d listed in Table 9). From 1999 to 2005, the prevalence of cigar use among Missouri high school students decreased on average by 7.9% per year. Missouri's average annual decrease over this time was similar to that observed nationally (-7.4%).

#### Tobacco: Smokeless Tobacco - Past Month Use



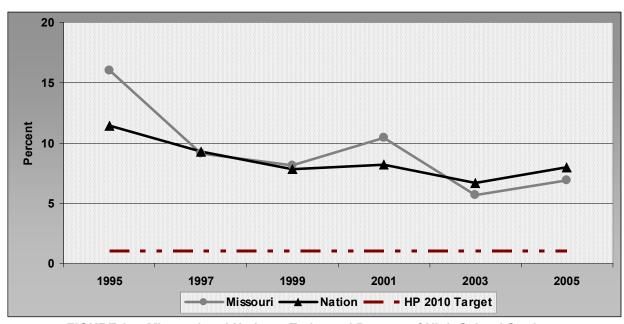
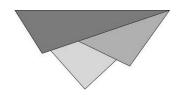


FIGURE 25. Missouri and Nation – Estimated Percent of High School Students Who Reported Using Smokeless Tobacco in the Past Month: 1995-2005.

[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Chewing tobacco and snuff, referred to as smokeless tobacco, pose a significant health risk and are not safe substitutes for smoking cigarettes.<sup>48</sup> Smokeless tobacco contains 28 cancer-causing agents and is associated with cancer of the oral cavity and recession of the gums.

In 2005, approximately one in 15 Missouri high school students reported using smokeless tobacco in the past month (Figure 27). The 2005 prevalence of past-month smokeless tobacco use among high school students (6.9%) was five percentage points above the Healthy People 2010 target of 1% (See Goal 27-2c listed in Table 9). From 1995 to 2005, the prevalence of smokeless tobacco use among Missouri high school students decreased on average by 10.0% per year, which was almost twice the average annual national decrease (-5.7%).



## **Tobacco: Smoking Cessation**

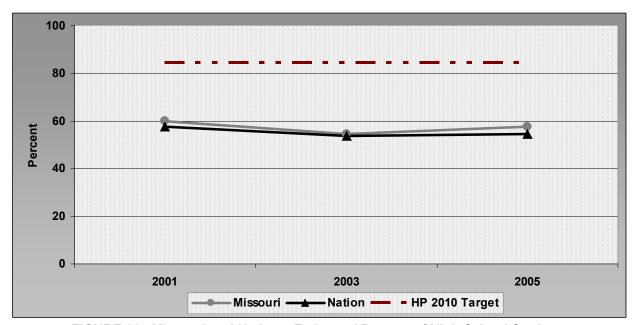


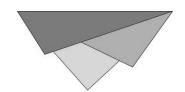
FIGURE 26. Missouri and Nation – Estimated Percent of High School Students Who Were Current Smokers and Reported Trying to Quit Smoking in the Past Year: 2001-2005.

[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

Tobacco dependence is best viewed as a chronic disease with remission and relapse.<sup>47</sup> Even though both minimal and intensive interventions increase smoking cessation, most people who quit smoking with the aid of such interventions will eventually relapse and may require repeated attempts before achieving long-term abstinence.

In 2005, almost two-fifths of Missouri high school students who were current smokers reported trying to quit smoking in the past year (Figure 24). The 2005 prevalence of trying to quit among high school students who smoked (57.7%) was approximately 26 percentage points below the Healthy People 2010 target of 84% (See Goal 27-7 listed in Table 9). From 2001 to 2005, the prevalence of trying to quit decreased on average by 1.5% per year, which was slightly better than the average annual national decrease (-2.4%).

## **Tobacco: Perception of Risk**



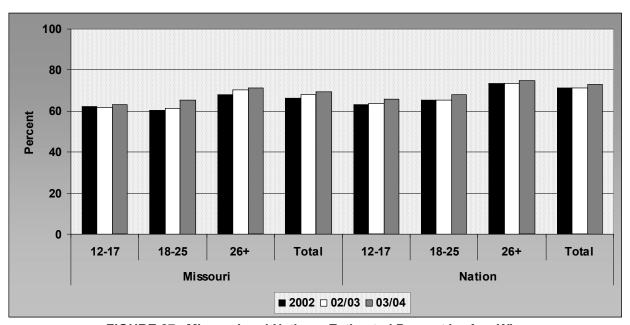


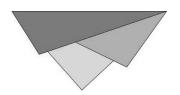
FIGURE 27. Missouri and Nation – Estimated Percent by Age Who Perceived Great Risk from Smoking One or More Packs of Cigarettes Per Day: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, seven in 10 Missourians 12+ years perceived great risk from smoking one or more packs of cigarettes daily. The perception of risk was generally similar across age groups (Figure 25).

From 2002 to 2004, Missouri's prevalence of perceived great risk from smoking one or more packs of cigarettes daily increased on average by 2.3% per year. Missouri's average annual increase was slightly greater than that observed nationally (1.2%).

Although not required to report at this time, Missouri's average annual increase in the prevalence of perceived great risk from smoking cigarettes was consistent with SAMHSA's prevention NOM for reducing morbidity by increasing the perceived harm associated with substance use.<sup>16</sup>



# **Tobacco: Availability and Procurement of Cigarettes**

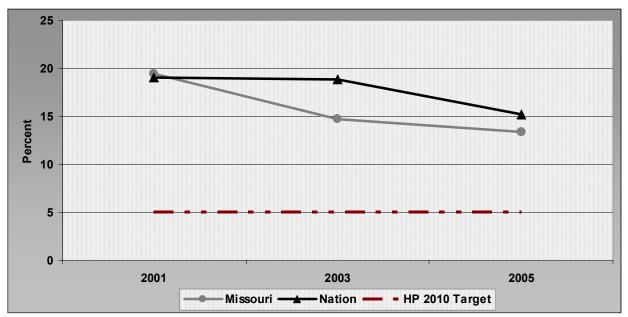
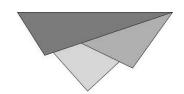


FIGURE 28. Missouri and Nation – Estimated Percent of High School Students Who Were Current Smokers and <18 Years Who Reported That in the Past 30 Days They 'Usually' Got Cigarettes by Buying Them from a Store or Gas Station: 2001-2005.

[SOURCE: Youth Risk Behavior Surveillance System, Centers for Disease Control and Prevention, U.S. Department of Health and Human Services]

In 2005, approximately one in every eight underage Missouri high school students who were current smokers reported that in the past month they usually got cigarettes by buying them from a store or gas station (Figure 28). The 2005 prevalence of illegally purchasing tobacco (13.4%) was approximately eight percentage points above the Healthy People 2010 target of 5% (See Goal 27-14a listed in Table 9). From 2001 to 2005, the prevalence of illegally purchasing tobacco decreased on average by 16.5% per year, which was better than the average annual national decrease (-10.1%). Nationally, in 2005 approximately 60% of eighth graders and 80% of sophomores reported that it would be "fairly easy" or "very easy" for them to procure cigarettes. The support of the procure cigarettes are considered to the procure of t

#### **Tobacco: Generated Revenue**



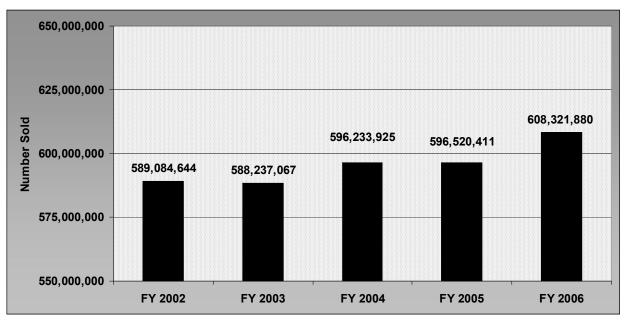
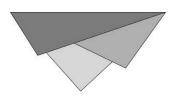


FIGURE 29. Missouri - Number of Tobacco Excise Tax Decals/Stamps Sold During Fiscal Years 2002-2006.

[SOURCE: Missouri Department of Revenue.]

In Fiscal Year (FY) 2005, the Missouri Department of Revenue collected slightly more than \$117 million in cigarette taxes, a 0.3% increase from the previous fiscal year. In FY 2006, there were over six million tobacco excise stamps (decals) sold in Missouri for individual packs of cigarettes (Figure 29). From FY 2002 to FY 2006 the number of tobacco excise stamps sold increased on average by 0.8% per year. This translates into an estimated annual increase of over 4.8 million packs of cigarettes sold each year.

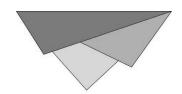


A needs assessment has found that localities with high levels of substance use are generally characterized by:

- lax enforcement of drug-related laws,
- communities and parents with favorable norms towards substance use,
- · more families with poor parenting skills,
- lower proportions of youth with strong commitments to school and
- more youth with
  - a) high perceptions of drug availability,
  - b) friends who drink or use drugs and
  - c) perception of substance use as low risk.<sup>50</sup>

Also localities with high rates for juvenile arrests, sexually transmitted diseases, teen births and poor school achievement are more likely to have high rates of antisocial behavior.

## Dependence and Need: Alcohol - Past Year Dependence and Abuse



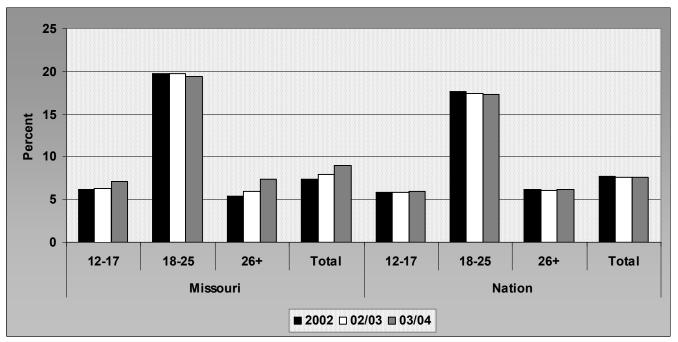
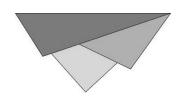


FIGURE 30. Missouri and Nation – Estimated Percent by Age Who Reported Alcohol Dependence or Abuse in the Past Year: 2002-2004. [SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, almost one-tenth of Missourians 12+ years (an estimated 440,000 people) reported alcohol dependence or abuse in the past year. Young adults 18-25 years were most likely to report dependence or abuse (Figure 30).

From 2002 to 2004, Missouri's prevalence of dependence or abuse in the past year increased on average by 10.4% per year. This increase was largely due to dependence and abuse among older adults 26+ years, which increased 17.3% during this time. A smaller increase was noted among adolescents 12-17 years (+7.5%). In contrast, the national prevalence of dependence or abuse had a slight average annual decrease over this time (-0.5%).



#### **Dependence and Need: Alcohol – Needing Without Receiving Treatment**

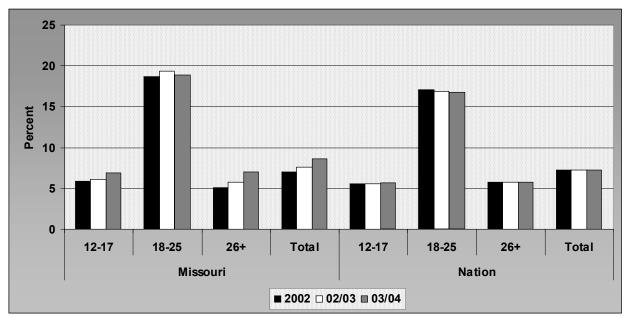


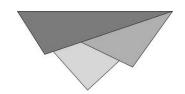
FIGURE 31. Missouri and Nation – Estimated Percent by Age Who Reported Needing but Not Receiving Treatment for Alcohol Use in the Past Year: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, approximately one in twelve Missourians 12+ years (an estimated 420,000 people) reported needing but not receiving treatment for alcohol dependence or abuse in the past year (Figure 31). The prevalence of not receiving treatment was approximately 2.5 times higher among young adults 18-25 years than in other age groups.

From 2002 to 2004, the prevalence of needing but not receiving treatment among Missourians increased on average by 10.6% per year. Most of this increase was among older adults 26+ years (+16.7%), with a smaller increase among adolescents 12-17 years (+8.0). In contrast, the average annual percent change for the nation was almost zero during this time.

## Dependence and Need: Illicit Drugs - Past Year Dependence and Abuse



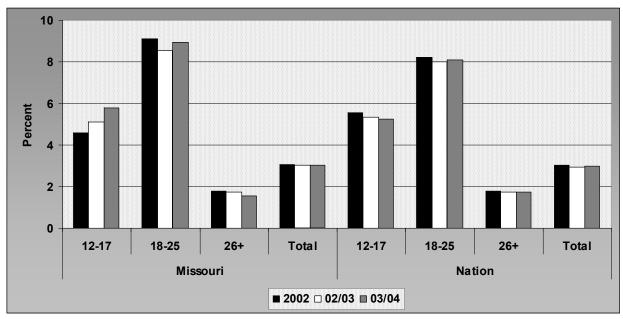
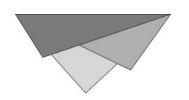


FIGURE 32. Missouri and Nation – Estimated Percent by Age Who Reported Illicit Drug Dependence or Abuse in the Past Year: 2002-2004. [SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, approximately one in 33 Missourians 12+ years (an estimated 147,000 people) reported dependence or abuse of any illicit drug in the past year (Figure 32). Young adults 18-25 years were most likely to report dependence or abuse.

From 2002 to 2004, Missouri's prevalence of dependence or abuse of illicit drugs decreased on average by 0.8% per year. However, adolescents 12-17 years had a marked average annual increase (+12.7%) in the prevalence of dependence or abuse. Missouri's average annual decrease over this time was similar to that observed nationally (-1.2%).



#### **Dependence and Need: Illicit Drugs – Needing Without Receiving Treatment**

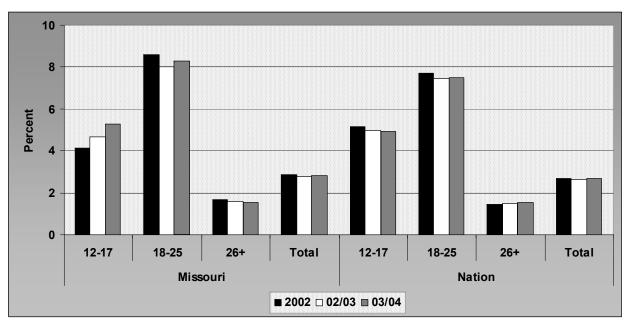


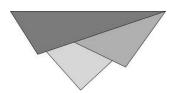
FIGURE 33. Missouri and Nation – Estimated Percent by Age Who Reported Needing but Not Receiving Treatment for Illicit Drug Use in the Past Year: 2002-2004.

[SOURCE: National Survey of Drug Use and Health (NSDUH), Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services. Due to changed sampling strategy that limits comparability, NSDUH data prior to 2002 was not included in this report. To improve the reliability of prevalence estimates, when possible the preceding year's data were pooled with the current year's data.]

According to pooled 2003 and 2004 data, approximately one in 35 Missourians 12+ years (an estimated 137,000 people) reported needing but not receiving treatment for illicit drug dependence or abuse in the past year (Figure 33). As with dependence and abuse, the prevalence of not receiving treatment was higher among young adults 18-25 years than among other age groups.

From 2002 to 2004, the prevalence of needing but not receiving treatment among Missourians slightly decreased on average by 0.3% per year. As with dependence and abuse, however, adolescents 12-17 years had a marked average annual increase (+13.0%) in the prevalence of not receiving needed treatment. In contrast, the average annual percent change for the nation was almost zero during this time.



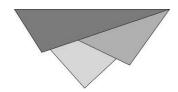


As noted previously, the costs, health risks and behavioral correlates of substance abuse place an enormous burden on society.<sup>11</sup> As the leading health problem, addiction strains the health care system and economy, harms family life and threatens public safety. For example:

- There are more deaths and disabilities each year from substance abuse than from any other cause,
- Fetal alcohol syndrome is the leading known cause of mental retardation,
- Untreated addiction is more expensive than heart disease, diabetes and cancer combined,
- More than half of all adults have a family history of alcoholism or problem drinking, and
- One-third of all suicides and more than half of all homicides and incidents of domestic violence are alcohol-related.

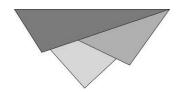
Addiction, like other diseases, can be overcome with proper prevention and treatment. Increasing access to care will lessen addiction's toll on families and society.

#### **Economic Costs to Missouri State Government**



According to a study sponsored by the National Institute on Drug Abuse and the National Institute on Alcohol Abuse and Alcoholism, the estimated annual national economic cost of substance abuse was over \$245 billion of which approximately 40% was attributable to drug abuse. Of this cost, over 50% was associated with drug-related crime, including lost productivity of victims and incarcerated perpetrators; property damage; and police, legal and corrections services expenses. Other costs include premature death, lost productivity due to drug-related illness and health care expenditures. Costs are borne primarily by government or by drug abusers and their households.

In Missouri state spending on substance abuse-related services includes those costs incurred by the judiciary, corrections, education, health, child welfare and family income assistance, mental health, public safety and the state workforce. In 1998, Missouri spent an estimated \$1.325 billion on substance abuse, an estimated \$245 per Missourian. This amount represents approximately 12.5% of the state budget. Of every \$100 of state spending related to substance abuse, approximately \$96.63 was spent on providing services such as incarceration, health care, child services and law enforcement, while only \$3.06 was spent on actual prevention and treatment with the remainder spent on regulation and compliance.



## Morbidity and Mortality: Prenatal Exposure

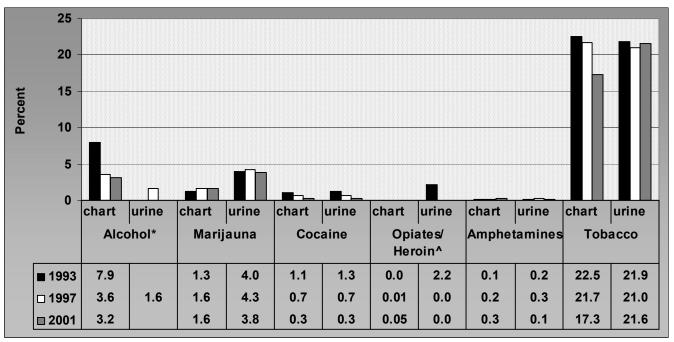


FIGURE 34. Estimated Prevalence of Prenatal Exposure to Alcohol, Illicit Drugs and Tobacco among Missouri Residents: 1993, 1997 and 2001.

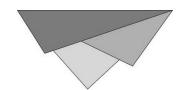
[SOURCE: Focus...Missouri 2001 Prenatal Drug Prevalence Study. Missouri Department of Health and Senior Services.]

A multi-year study that estimated the prevalence of prenatal exposure to alcohol, illicit drugs and tobacco from chart reviews and urine samples found that exposure to alcohol and cocaine decreased, while exposure to other substances was relatively unchanged (Figure 34).<sup>52</sup> However, testing limitations (short detection times and cross-reactivity) and discrepancies between self-reported (chart reviews and births certificates) and clinical (urine samples) findings makes it difficult to reliably estimate the prevalence of prenatal exposures.

<sup>\*</sup>NOTE: Urine samples were not tested for alcohol in 1993 and 2001.

<sup>^</sup> NOTE: No positive chart reviews for opiates/heroin use were found in 1993. No positive urine samples for opiates/heroin were found for 1997 and 2001.

## Morbidity and Mortality: Births affected by Maternal Substance Use



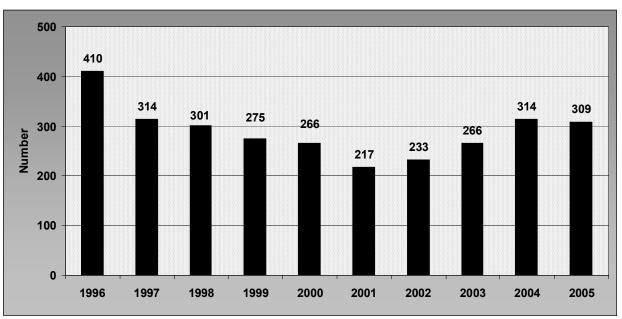
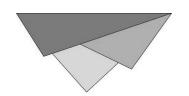


FIGURE 35. Births to Missouri Residents Affected by Maternal Use of Alcohol or Drugs: 1996-2005.

[SOURCE: Missouri Department of Health and Senior Services, Bureau of Health Informatics.]

From 1996 to 2005, the number of Missouri births affected by maternal substance use decreased on average by 2.2% per year (Figure 35). Until 2005, however, the frequency of births affected by maternal substance use had been increasing by 9.5% per year since 2001.



# Morbidity and Mortality: Hospitalizations and Emergency Department Encounters.

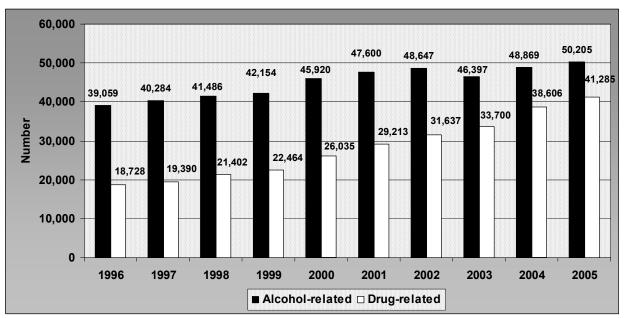


FIGURE 36. Alcohol- and Drug-Related Hospitalizations and Emergency Department Admissions of Missouri Residents: 1996-2005.

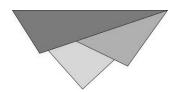
NOTE: Admission/encounter data includes all hospitalizations and emergency department services where alcohol or drugs were listed as any diagnosis.

[SOURCE: Missouri Department of Health and Senior Services, Bureau of Health Informatics.).

From 1996 to 2005, the number of alcohol- and drug-related hospitalizations and emergency department encounters of Missourians increased on average by 2.9% and 9.3% per year respectively (Figure 36). These data are inconsistent with the Healthy People 2010 targets of reducing drug- and alcohol-related emergency department visits (See Goals 26-4, 26-5 listed in Table 9). The second of the control of the contr

In 2005, there was an alcohol-related hospitalization or emergency department encounter for an estimated one in every 116 Missourians. During this same year, there was a drug-related hospitalization or emergency department encounter for an estimated one in every 140 Missourians. Considering only those hospitalizations and emergency department services where alcohol, cirrhosis, or drugs was listed as the primary diagnosis, Missouri residents accumulated over \$120 million in charges in 2005.

#### Morbidity and Mortality: Deaths



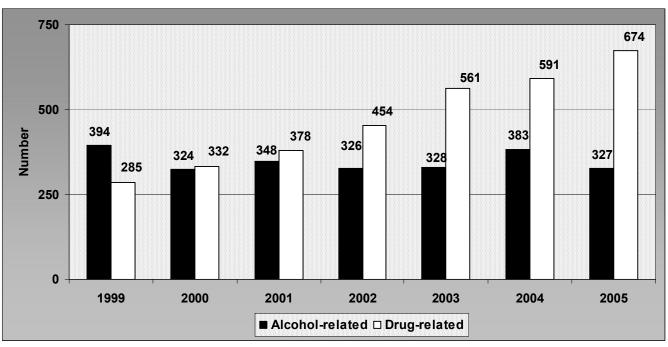
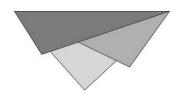


FIGURE 37. Alcohol- and Drug-Related Deaths among Missouri Residents: 1999-2005.\*

\* Mortality data includes only those deaths where alcohol or drugs were listed as the underlying cause. [SOURCE: Missouri Department of Health and Senior Services, Bureau of Health Informatics.).

From 1999 to 2005, alcohol-related deaths among Missouri residents decreased on average by 2.3% (Figure 37). These data are consistent with the Healthy People 2010 target of reducing cirrhosis deaths {See Goal 26-2 listed in Table 9}. In 2005, there was an alcohol-related death for an estimated one in every 17,738 Missourians. <sup>53</sup>

From 1999 to 2005, the number of drug-related deaths among Missouri residents increased on average by 15.6% (Figure 37). These data are inconsistent with the Healthy People 2010 target of reducing drug-induced deaths {See Goal 26-3 listed in Table 9}. In 2005, there was a drug-related death for an estimated one in every 8,606 Missourians. 53



# Morbidity and Mortality: Smoking-Attributable Deaths

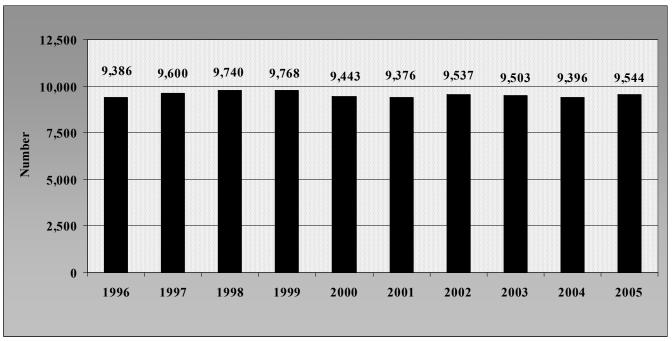
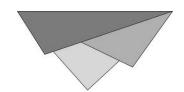


FIGURE 38. Smoking-Attributable Deaths among Missouri Residents: 1996-2005.

[SOURCE: Missouri Department of Health and Senior Services, Bureau of Health Informatics.).

From 1996 to 2005, the number of smoking-attributable deaths among Missourians remained generally unchanged (Figure 38). In 2005, there was a smoking-attributable death for an estimated one in every 608 Missourians.<sup>53</sup>

#### Morbidity and Mortality: Communicable Diseases



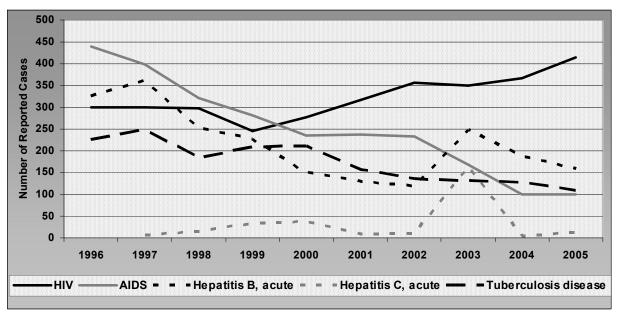
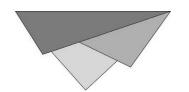


FIGURE 39. HIV, AIDS, Acute Hepatitis B and C and Tuberculosis Disease Cases Reported to the Missouri Department of Health and Senior Services: 1996-2005.

[SOURCE: Communicable Disease Surveillance, Data and Statistical Reports. Missouri Department of Health and Senior Services, Section for Disease Control and Environmental Epidemiology.]

From 1996 to 2005, the number of reported HIV cases in Missouri increased on average by 4.2% per year, but the number of AIDS cases decreased by 14.0% (Figure 39). During this same time, the number of acute Hepatitis B and tuberculosis disease cases had average annual decreases of 1.8% and 6.8%, respectively. Although problematic due to changes in case definition, and excluding the anomalous 2003 data, from 1997 to 2005 the number of reported acute Hepatitis C cases ranged between four and 37.



## Family Discord: Child Abuse and Neglect

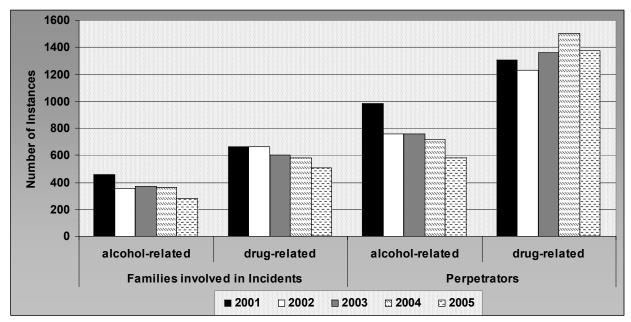


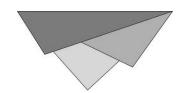
FIGURE 40. Missouri Families and Perpetrators Involved in Alcohol- and Drug-Related Instances of Child Abuse and Neglect Reported to the Missouri Department of Social Services: 2001-2005.

[SOURCE: Child Abuse and Neglect Annual Reports. Missouri Department of Social Services, Children's Division, Research and Evaluation Unit.]

In 2005, 13.5% of families involved in substantiated incidents of child abuse and neglect were characterized as having alcohol or drug-related problems (Figure 40). During this same year 27.3% of child abuse or neglect perpetrators were characterized as having alcohol or drug-related problems.

From 2001 to 2005, the number of families involved in child abuse or neglect and characterized with an alcohol-related problems decreased on average by 10.8% per year, while the number with drug-related problems annually decreased by 6.4%. During the same period the number of perpetrators with an alcohol-related problems annually decreased by 12.0%. However, the number of perpetrators with drug-related problems annually increased by 1.7%.

#### Family Discord: Out-of-Home-Placements



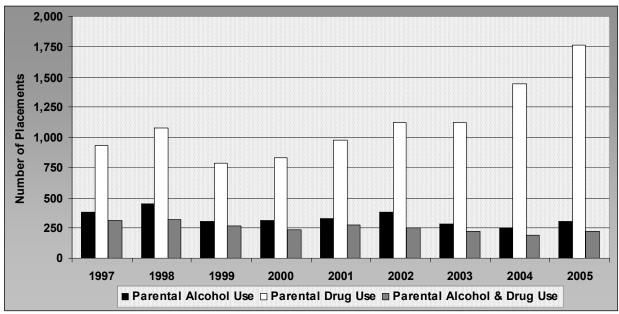
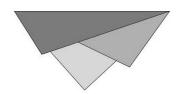


FIGURE 41. Missouri Juveniles Placed Outside Their Homes Due to Parental Alcohol or Drug Use: 2001-2005.

[SOURCE: Juvenile Court Statistics Reports. Missouri Department of Social Services, Division of Youth Services, Research and Evaluation Unit.]

In 2005, almost 2,300 Missouri juveniles were placed outside their homes due to parental alcohol or drug use (Figure 41). From 1997 to 2005, parental alcohol or drug use has accounted for on average 29% of all out-of-home placements. During this time the number of placements outside the home due to parental alcohol use decreased on average by 0.9% per year. However, the out-of-home placements due to parental drug use increased on average by 9.7% per year. In comparison, the total number of out-of-home placements had an average annual decrease of 1.1% during this time.



## Family Discord: Removal from School/Class

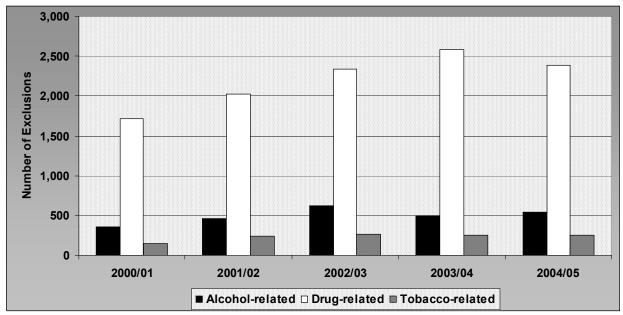


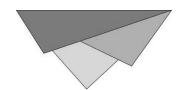
FIGURE 42. Students Excluded from Missouri Public Schools or Classes Because of Alcohol, Drugs and Tobacco by School Year: 2000-2005.

[SOURCE: Annual Summaries of Discipline Incidents. Department of Elementary and Secondary Education.]

During the 2004/2005 school year, approximately 3,182 students were removed from Missouri elementary and secondary public schools or classes because of alcohol, drugs or tobacco (Figure 42). Removals included expulsion, in- and out-of-school suspension and placement in alternate interim settings. During this year approximately 12% of all school removals were related to alcohol, drugs or tobacco.

From the 2000/01 to 2004/05 school year alcohol-related removals have increased on average by 13.0% per year while drug-related removals have annually increased by 9.2%. Tobacco-related removals annually increased by 15.8%. During these school years approximately 17% of all removals were related to alcohol, drugs or tobacco.

### Criminal Activity: Alcohol-Related Traffic Accidents, Fatalities and Injuries



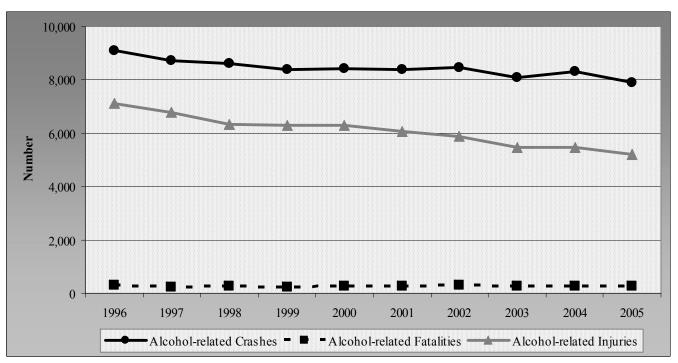
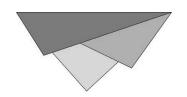


FIGURE 43. Alcohol-Related Traffic Accidents, Fatalities and Injuries Reported to the Missouri State Highway Patrol: 1996-2005. [SOURCE: Annual Missouri Traffic Safety Compendia. Missouri Department of Public Safety State Highway Patrol, Information Systems Division]

In 2005, there were 7,888 reported traffic accidents in Missouri that involved driver or pedestrian alcohol use (Figure 43). From 1996 to 2005, the number of alcohol-related crashes decreased on average by 1.5% per year.

Of the 2005 accidents, there were 274 fatalities and 5,216 injuries. From 1996 to 2005, the number of fatalities ranged between 217 and 291, with a slight average annual increase of 0.5%. In contrast, the number of injuries during this same time had an average annual decrease of 3.3%.

Although not required to report at this time, Missouri's average annual decrease in alcohol-related accidents and injuries was consistent with SAMHSA's prevention NOM for reducing criminal justice involvement by decreasing alcohol-related car crashes and injuries.<sup>16</sup>



### Criminal Activity: Drug-Related Traffic Crashes, Fatalities and Injuries

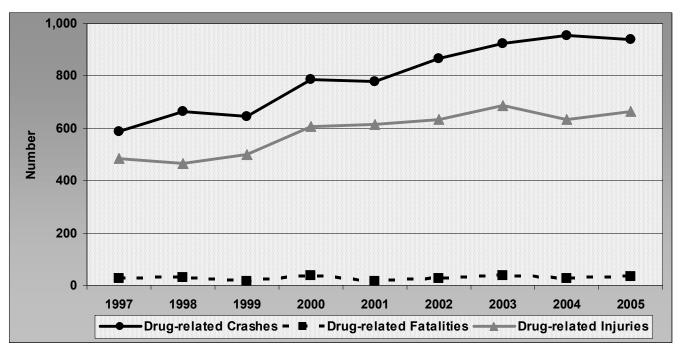
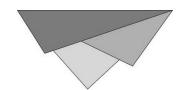


FIGURE 44. Drug-Related Traffic Accidents, Fatalities and Injuries Reported to the Missouri State Highway Patrol: 1997-2005. [SOURCE: Annual Missouri Traffic Safety Compendia. Missouri Department of Public Safety State Highway Patrol, Information Systems Division]

In 2005, there were 940 reported traffic accidents in Missouri that involved driver or pedestrian drug use (Figure 44). From 1997 to 2005, the number of drug-related crashes increased on average by 6.4% per year.

Also in 2005, there were 34 fatalities and 663 injuries due to these drug-related crashes. From 1997 to 2005, the number of fatalities ranged between 14 and 38, with an average annual increase of 22.4%. During this same time the number of injuries due to drug-related crashes increased on average by 4.3% per year.

## Criminal Activity: Arrests for Driving Under the Influence



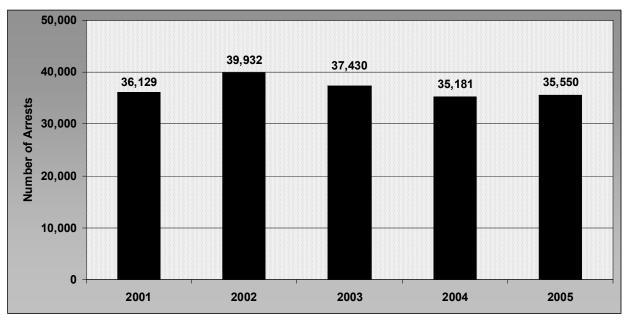
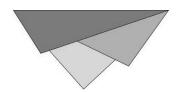


FIGURE 45. Arrests for Driving Under the Influence Reported to the Missouri State Highway Patrol: 2001-2005.\*

NOTE: Data generated on 10/04/06. Data subject to change as records are continuously updated in the database. [SOURCE: Part I and II Crimes, on-line Uniform Crime Reporting Program. Missouri Highway Patrol, Missouri Department of Public Safety.]

As of 10/04/2006, 2005 data show there were 35,550 reported Missouri arrests for driving under the influence, 9.7% of all arrests reported to the State Highway Patrol (Figure 45). In addition, there were 346 reported arrests for boating while intoxicated. From 2001 (the year that mandatory Uniform Crime Reporting was instituted) to 2005, the number of driving-under-the-influence arrests slightly decreased on average by 0.2% per year.

Although not required to report at this time, Missouri's average annual decrease in arrests for driving under the influence was consistent with SAMHSA's prevention NOM for decreasing criminal justice involvement by decreasing alcohol- and drug-related crime.<sup>16</sup>



## **Criminal Activity: Arrests for Drugs**

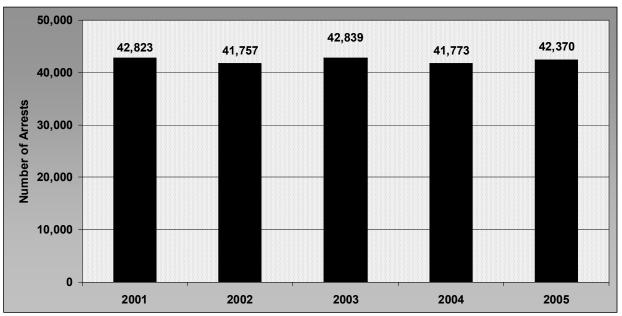


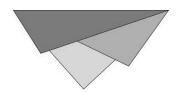
FIGURE 46. Arrests for Drug Offenses Reported to the Missouri State Highway Patrol: 2001-2005.\*

\*NOTE: Data generated on 10/04/06. Data subject to change as records are continuously updated in the database. [SOURCE: Part I and II Crimes, on-line Uniform Crime Reporting Program. Missouri Highway Patrol, Missouri Department of Public Safety.]

As of 10/04/2006, 2005 data show there were 42,370 reported Missouri arrests for drug offenses, 11.6% of all arrests reported to the State Highway Patrol for this year (Figure 46). In addition, there were 1,003 reported arrests for drunkenness. From 2001 (the year that mandatory Uniform Crime Reporting was instituted) to 2005, the number of drug offense arrests slightly decreased on average by 0.2% per year.

Although not required to report at this time, Missouri's average annual decrease in arrests for drug offenses was consistent with SAMHSA's prevention NOM for decreasing criminal justice involvement by decreasing drug-related crime. <sup>16</sup>

### **Criminal Activity: Methamphetamine Lab Seizures**



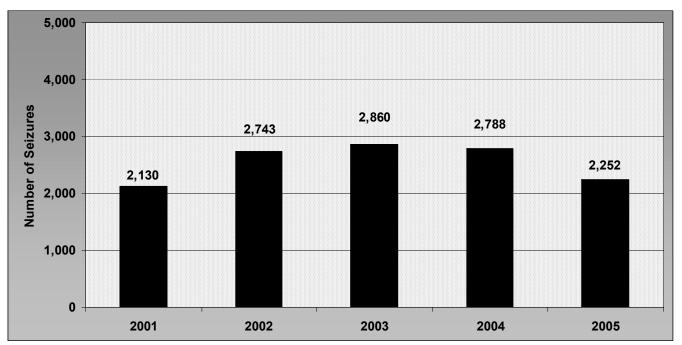
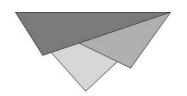


FIGURE 47. Methamphetamine Laboratory Seizures Reported to the Missouri State Highway Patrol: 2001-2005.

[SOURCE: Annual Statewide Lab Incidents. Division of Drug and Crime Control, Missouri Highway Patrol, Missouri Department of Public Safety.]

In 2005, there were 2,252 reported methamphetamine laboratory seizures (Figure 47). From 2001 (when mandatory Uniform Crime Reporting was instituted), the number of methamphetamine lab seizures increased until 2003 when they subsequently declined for an overall average annual increase of 2.8%.



## Criminal Activity: Alcohol and Drug Charges Filed in Circuit Court

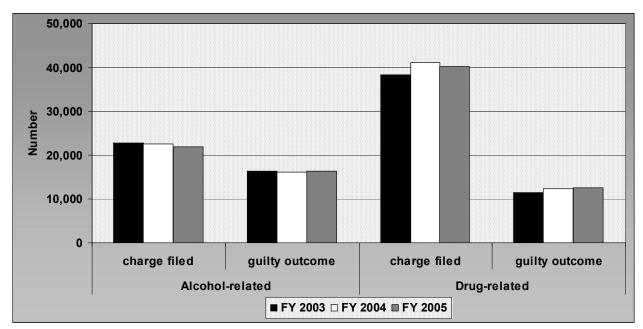
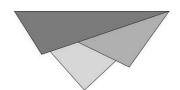


FIGURE 48. Alcohol and Drug Charges Filed and Guilty Outcomes in Associate Division of Missouri's Circuit Courts: 2003-2005. [SOURCE: Statistics for Drug- and Alcohol-Related Offenses, Annual Reports. Missouri Courts, Judicial Branch of State Government.]

In FY 2005, over 62,000 alcohol and drug charges were filed with over 28,000 guilty outcomes in the Associate Division of Missouri Circuit Courts (Figure 48). From FY 2003 to FY 2005, the number of alcohol charges decreased on average by 1.7% per year, but the number of drug charges increased by 2.4% annually. Similarly, the number of guilty outcomes for alcohol charges decreased by 0.2% annually, while the number of guilty outcomes for drug charges annually increased by 4.5% during this time.

Although not required to report at this time, Missouri's average annual decrease in alcohol charges filed in the Associate Division of Circuit Courts was consistent with SAMHSA's prevention NOM for decreasing criminal justice involvement by decreasing alcohol-related crime.<sup>16</sup>

## Criminal Activity: Incarceration for Drug Offenses and Driving while Intoxicated



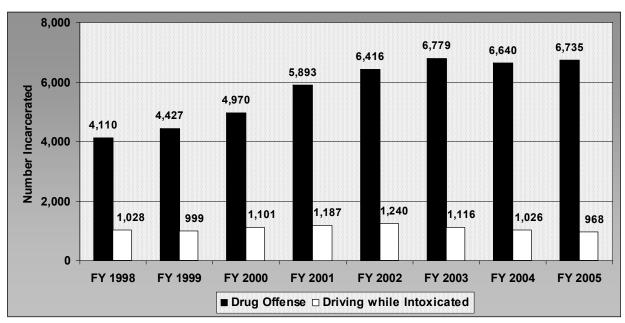


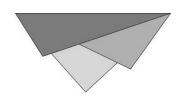
FIGURE 49. Individuals Incarcerated in Missouri Department of Corrections Facilities for Drug and Driving-While-Intoxicated Offenses: Fiscal Years 1998-2005.

[SOURCE: Annual Offender Profiles. Missouri Department of Corrections, Division of Offender Rehabilitative Services.]

In FY 2005, almost one-quarter of individuals in Missouri Department of Corrections (DOC) facilities were incarcerated for drug-related offenses (21.7%) or driving while intoxicated (3.1%) (Figure 49). However, DOC staff determined 89% of assessed inmates required some type of substance abuse intervention. From FY1998 to FY2005, the number of drug offenders incarcerated in DOC facilities increased on average by 7.5%, and the number of DWI offenders annually decreased by 0.6%.

The average cost to house one inmate in prison for one year was approximately \$14,540. Therefore it cost approximately \$112 million to house drug and DWI offenders in FY 2005. The average sentence for drug and DWI offenders was 8.1 and 4.5 years, respectively. For those first released from FY 1995 through FY 2005, almost one-fifth will return to prison within one year, and almost one-half will return within five years.

In FY2005, the distribution, delivery, manufacture, or production (or the attempt to) or the possession with the intent to distribute, deliver, manufacture, or produce a controlled substance was the most common offense among institutionalized offenders.<sup>54</sup> Other drug and alcohol related offenses in the top 20 were possession of a controlled substance, except 35 grams or less of marijuana (3<sup>rd</sup>); driving while intoxicated, alcohol (8<sup>th</sup>); and trafficking in drugs/attempt to traffic in drugs, 2<sup>nd</sup> degree (16<sup>th</sup>).



# Criminal Activity: Probation and Parole for Drug Offenses and Driving while Intoxicated

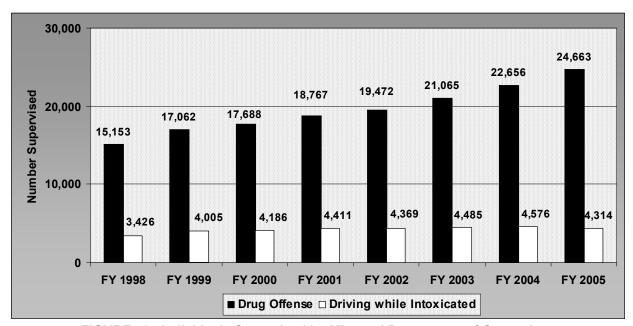


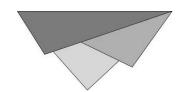
FIGURE 50. Individuals Supervised by Missouri Department of Corrections for Drug and Driving-While-Intoxicated Offenses: Fiscal Years 1998-2005.

[SOURCE: Annual Offender Profiles. Missouri Department of Corrections, Division of Offender Rehabilitative Services.]

In FY 2005, approximately two-fifths of offenders on probation and parole were supervised for drug related offenses (37.1% and 33.5%, respectively) or DWI (6.6% and 5.6% respectively) (Figure 50).<sup>54</sup> For these offenders, the two most common offenses were *possession of a controlled substance* and *distributing, delivering or manufacturing a controlled substance*. However, almost 70% of those on probation and over 85% of parolees had some type of substance abuse or dependence. In 2005, the estimated cost to supervise one individual on probation or parole in the general community for one year was approximately \$920, resulting in an estimated cost of \$26.5 million to supervise drug and DWI offenders.<sup>55</sup>

From FY 1998 to FY 2005, the number of drug offenders on probation or parole increased on average by 7.2%, while the number of DWI offenders annually increased by 3.5%.

## Criminal Activity: Juvenile Court Referrals for Alcohol and Drug Offenses



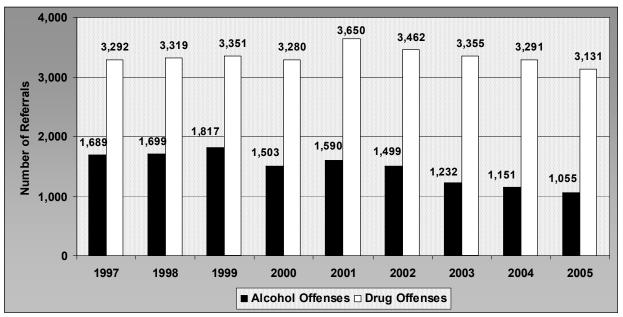
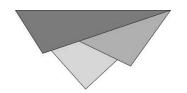


FIGURE 51. Missouri Juvenile Court Referrals in Missouri Due to Alcohol or Drug Offenses: 1997-2005.

[SOURCE: Juvenile Court Statistics Reports. Missouri Department of Social Services, Division of Youth Services, Research and Evaluation Unit.]

In 2005, almost 4,200 Missouri adolescents were referred to juvenile court because of alcohol or drug offenses (Figure 51). From 1997 to 2005, the number of adolescents referred to juvenile court for alcohol offenses decreased on average by 5.3% per year, while the number of referrals for drug offenses had an average annual decrease of 0.5%.

Although not required to report at this time, Missouri's average annual decrease in juvenile court referrals because of alcohol or drug offenses was consistent with SAMHSA's prevention NOM for decreasing criminal justice involvement by decreasing alcohol- and drug-related crime.<sup>16</sup>



#### **Criminal Activity: Division of Youth Services Commitments**

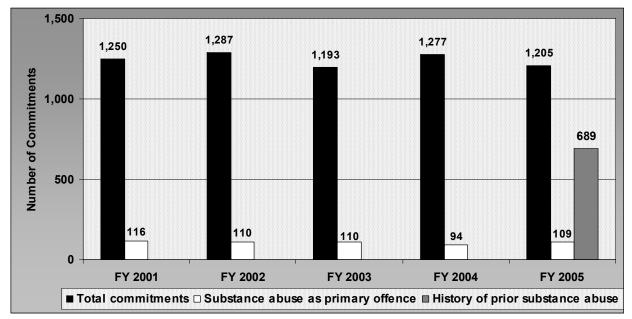
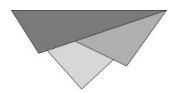


FIGURE 52. Youths Committed to Legal and Physical Custody of the Missouri Department of Social Services: 2001-2005. [SOURCE: Youth Services Annual Reports. Missouri Department of Social Services Division of Youth Services, Research and Evaluation Unit.]

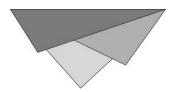
In FY 2005, over 1,200 Missouri youths were committed to the legal and physical custody of the Department of Social Services, Division of Youth Services. Of these youths, almost one-tenth had a primary offense that was alcohol, drug or tobacco related, and almost three-fifths had a history of substance abuse involvement (Figure 52). From FY 2001 through FY 2005, the number of youths committed with substance abuse as their primary offense decreased on average by 0.9% per year, while the total number of commitments for any reason had an average annual decrease of 0.7%.







Successful substance abuse prevention and treatment services better people's lives.<sup>2</sup> However, Missouri communities face many financial and logistical challenges toward implementing these programs. ADA-funded programs recently have provided structured prevention services to over 90,000 individuals annually, an estimated one in every 64 Missourians.<sup>53</sup> Additionally, ADA-funded clinical treatment programs have provided services to over 40,000 individuals annually, an estimated one in every 145 Missourians.

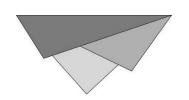


ADA's prevention activities are consistent with the Department of Mental Health's overarching strategic plan, vision, mission and values. ADA's prevention system – and its five major components (Community 2000, other community-based services, school-based initiatives, regional support centers and a statewide training and resource center) – implements and supports evidence-based programs that address individual, peer, family, community and environmental risk factors. Evidence-based programs sponsored by ADA and offered through the five major components include:

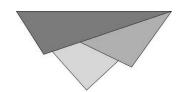
- community-based services How to Cope, All Stars, Strengthening Families, Across the Ages, Big Brothers/Big Sisters Mentoring Program, SMART Moves/SMART Leaders, Project Alert and Project Towards No Drug Use;
- school-based initiatives Positive Action, Second Step: A Violence Prevention Curriculum, Life Skills Training, Reconnecting Youth, Peace Builders and Too Good for Drugs; and
- regional support centers Social Norming for College Campuses, Retail-Directed Merchant and Community Education for Tobacco and Community Coalition Capacity Building.

To prevent the risk factors for substance abuse, ADA-supported programs employ six strategies, each of which utilizes multiple activities. These are:

- 1. <u>Information:</u> Potentially reaching four million individuals aged 5 to 64 years, substance abuse prevention information is disseminated through prevention providers, including three Regional Alcohol and Drug Awareness Resource (RADAR) network sites, 11 regional support centers (RSC), the Statewide Resource Center, Partners in Prevention (PIP), the Missouri Substance Abuse Prevention Resources Network (MSAPRN) and community coalitions. RADAR primarily provides current information to prevention practitioners. PIP, a coalition of 12 public institutions of higher education, targets high-risk drinking among Missouri collegians. MSAPRN targets groups at high-risk for substance abuse, especially teens. Other dissemination venues include health and prevention fairs and national prevention programs such as Great American Smoke Out and Alcohol Awareness Month. Education materials and employee training are offered to tobacco merchants as a part of the annual tobacco merchant education campaign.
- 2. <u>Education</u>: Center for Substance Abuse Prevention (CSAP) model programs offered through Boys and Girls Clubs, faith- and community-based sites and the School-based Prevention and Intervention IniTiative (SPIRIT) served over 40,000 Missouri youths. These programs utilize a wide variety of curricula. Creating Lasting Connections is targeted to children 8-12 years and their parents and guardians. All Stars targets those 11-14 years, and Smart Moves is aimed at 8-17 year olds. Other programming includes Peace Builders, Reconnecting Youth, Second Step, Positive Action and Life-Skills Training. Additionally, over 800 higher education professionals, law enforcement professionals, judicial officers and college students received training through PIP.



- 3. <u>Mobilization:</u> The sustainability and capacity of approximately 200 community coalitions are furthered by technical assistance provided by the RSCs. This assistance includes implementing a community assessment, strategic planning and goal prioritization, developing leadership skills, identifying funding sources, training and evaluation. ADA recently collaborated with 11 community coalitions to build capacity to specifically target underage and binge drinking. The PIP coalition continues to develop strategies for preventing and reducing high-risk drinking among Missouri college students. ADA's coalition building furthers the Healthy People 2010 target of increasing the number of communities using partnerships or coalition models to conduct comprehensive substance abuse prevention efforts {See Goal 26-23 listed in Table 9}. <sup>13</sup>
- 4. <u>Alternatives:</u> Many community-based coalitions and providers offer alternative prevention activities tailored to meet a local need. Training, program development and technical assistance for these local activities are proved through the consultant bank. Additionally, alternative prevention activities are also offered through PIP. They include community service and youth leadership. Prevention Assistance Grants are distributed on a competitive basis to Missouri coalitions to help assist in capacity building and sustainability.
- 5. Environmental and Social Policy: Community coalitions receive social policy orientation and training through a statewide community provider. Recently, coalitions engaged in informational activities related to proposed legislation that would promote zero tolerance for youth alcohol use and driving, increase excise taxes on alcoholic beverages, oppose legalization of marijuana for medical use and reduce methamphetamine production. To assist legislators with such policy issues, community coalition members provided information at legislative hearings. Some of these policy efforts were undertaken in conjunction with Missouri's Youth/Adult Alliance. Through the Perinatal Substance Abuse Advisory Committee, DMH took the lead in procuring funding for the Fetal Alcohol Syndrome Rural Awareness and Prevention Project aimed at reducing the number of alcohol-exposed births by encouraging proactive public policy centered on coordinating state services. Finally, over 4,300 college students have been served by PIP's social-norming campaigns, targeted at reducing the appeal of binge drinking.
- 6. <u>Problem Identification and Referral:</u> Prevention activities continue to target at-risk youth. Furthermore, prevention services have been modified for deaf and hearing impaired youth and adults. This service is accessed through a "warmline" and has served approximately 1,200 individuals. Additionally, over 6,600 college students were surveyed by PIP's Core Institute Alcohol and Drug Survey.



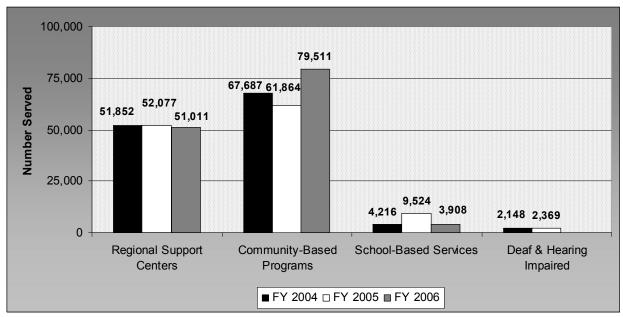
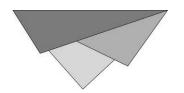


FIGURE 53. Individuals Served by ADA Prevention Activities: Fiscal Years 2004-2006

In FY 2006 ADA utilized statewide media to bring its prevention message to an estimated 4.5 million people, one in every 1.3 Missourians.<sup>53</sup> Also in FY 2006, ADA's prevention system supported more targeted prevention activities by serving approximately one in every 114 Missourians through the regional support centers and one in every 73 Missourians through community-based programs (Figure 53). School-based programs served an estimated one in every 300 school-aged children in Missouri in FY 2006. ADA-supported programs also served over 2,000 Missourians with hearing impairments.



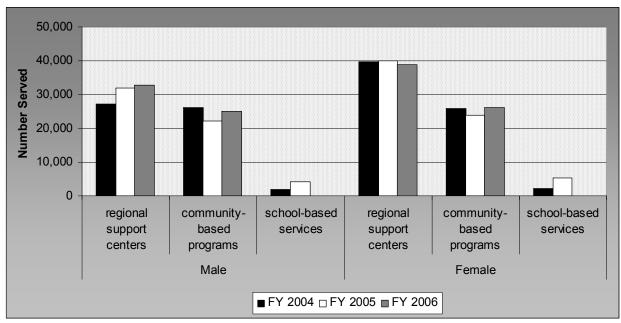
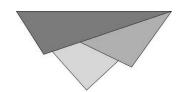


FIGURE 54. Individuals Served by ADA Prevention Activities by Sex: Fiscal Years 2004-2006.\*

\*NOTE: Sex-specific data for school-based services are not available for Fiscal Year 2006

In Fiscal Year (FY) 2006, approximately 7,000 more women than men received prevention services through the ADA prevention system (Figure 54). From FY 2004 to FY 2006, the ADA prevention system served an estimated 1.2 females for every male.

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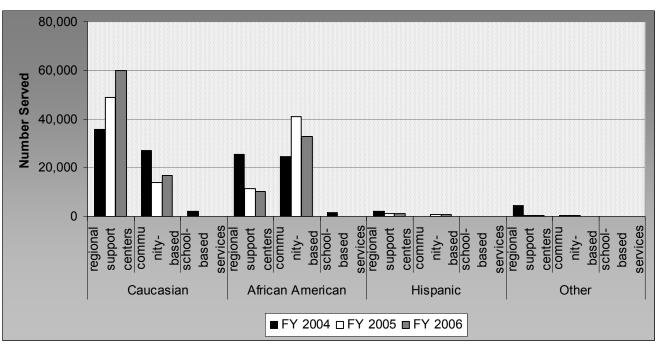
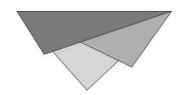


FIGURE 55. Individuals Served by ADA Prevention Activities by Race/Ethnicity: Fiscal Years 2004-2006.\*

\*NOTE: Race/ethnicity-specific data for school-based services are not available for Fiscal Years 2005 and 2006.

Over the past three fiscal years, approximately one in every 14 African-American Missourians received prevention services through ADA's prevention system. In comparison, one in every 73 Caucasians, 82 Hispanics and 81 'Other Race' Missourians were served during this time (Figure 55).<sup>53</sup> From FY 2004 through FY 2006, the number of Caucasians served by ADA's prevention system increased on average by 9.6% per year. In contrast, the number of African-Americans (-7.9%), Hispanics (-5.5%) and especially 'Other Race' individuals (-58.2%) exhibited an average annual decrease.



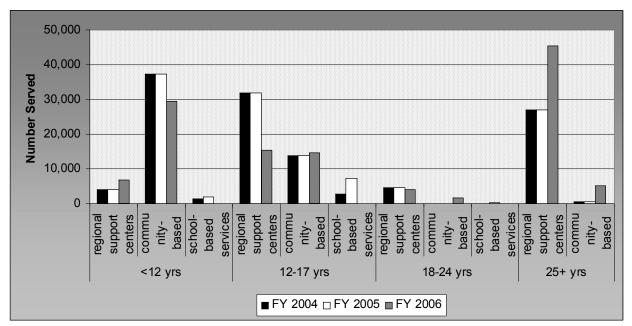
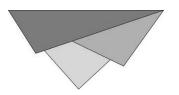


FIGURE 56. Individuals Served by ADA Prevention Activities by Age: Fiscal Years 2004-2006.\*

\*NOTE: Age-specific data for school-based services are not available for Fiscal Year 2006.

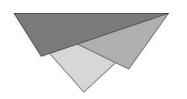
Over the past three fiscal years, Missouri youth less than 18 years were the most common beneficiaries of prevention services offered through ADA, with approximately one in every 16 receiving a prevention service (Figure 56).<sup>58</sup> Additionally, an estimated one in every 118 Missourians 18-24 years and one in every 113 Missourians 25+ years received services through the ADA prevention system. From FY 2004 through FY 2006, the overall number of Missourians served by ADA regional support centers, community-based programs and school-based services remained unchanged.

## **Prevention Services and Outcomes: School-based Prevention and Intervention Initiative**



In 2002, ADA implemented the School-Based Prevention Intervention and Resources IniTiative (SPIRIT) in five school districts. SPIRIT is an evidence-based substance abuse program.<sup>6</sup> The primary goals of SPIRIT are to improve overall school performance, delay onset of substance use, decrease overall substance use and reduce incidents of violence. Evidence-based prevention programs also were implemented in grades K-12. They included PeaceBuilders, Positive Action, Life Skills Training, Second Step and Reconnecting Youth. Over 5,500 children participated in SPIRIT programs during fiscal years 2003 through 2005, representing one of the largest in-school substance use prevention efforts in the history of Missouri.

Although project evaluation is not yet complete, to date SPIRIT programs have shown promising results for Missouri's school children.<sup>6</sup> Principals, providers and teachers reported SPIRIT made a positive impact upon students and school environment. Also, school children reported SPIRIT helped them feel better about themselves, control anger, get along better with others and learn how to act in tough situations.



## Prevention Services and Outcomes: School-based Prevention and Intervention Initiative

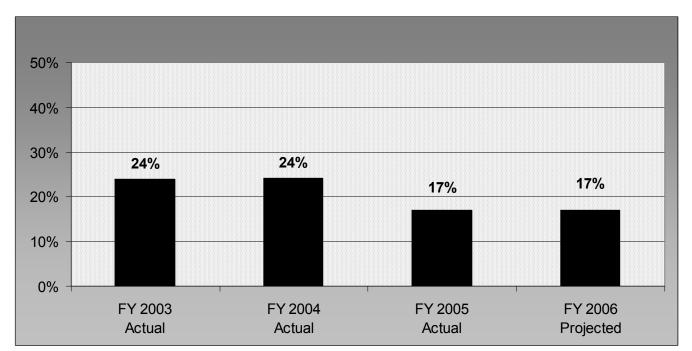
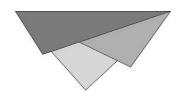


FIGURE 57. Grades K-5 SPIRIT Program Participants Absent from School Ten or More Days a Year: Fiscal Years 2003-2006. [SOURCE: Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, FY 2006 Budget Decision Items.]

Among K-5 SPIRIT participants, the number who missed ten or more school days declined by seven percentage points during the implementation period, a 29% overall decrease (Figure 57).

# **Prevention Services and Outcomes: School-based Prevention and Intervention Initiative**



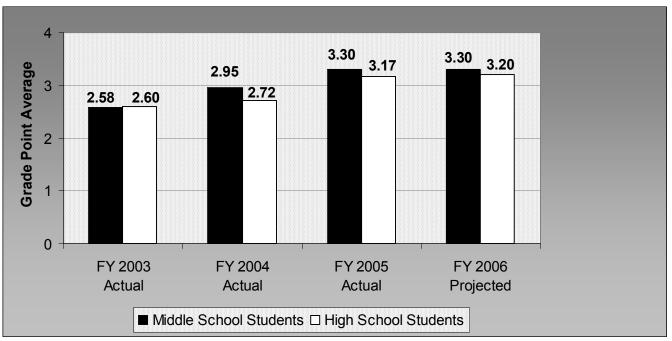
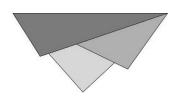


FIGURE 58. Average Grade Point of Middle and High School SPIRIT Program Participants: Fiscal Years 2003-2006. [SOURCE: Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, FY 2006 Budget Decision Items.]

Among school children participating in SPIRIT programming, grade point averages for middle school students increased by 8.7% while the GPA for high school students increased by 7.4% (Figure 58).



## Prevention Services and Outcomes: School-based Prevention and Intervention Initiative

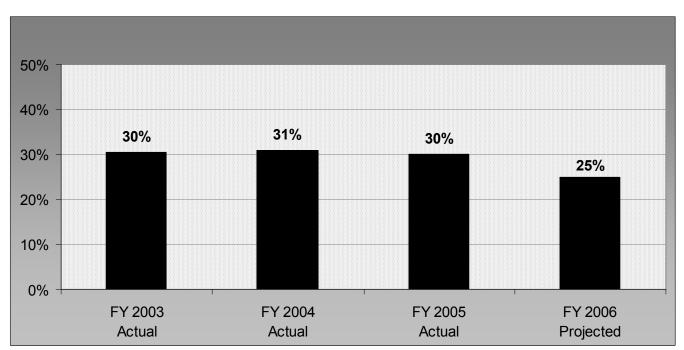
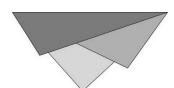


FIGURE 59. Grades 9-12 SPIRIT Program Participants Reporting Alcohol Use in the Past 30 Days: Fiscal Years 2003-2006. [SOURCE: Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, FY 2006 Budget Decision Items.]

Among high school students participating in SPIRIT programming, the number who reported alcohol use in the past 30 days is projected to decline by six percentage points by the end of the implementation period, a 19% overall decrease (Figure 59).

### **Prevention Services and Outcomes: Federal Synar Amendment.**



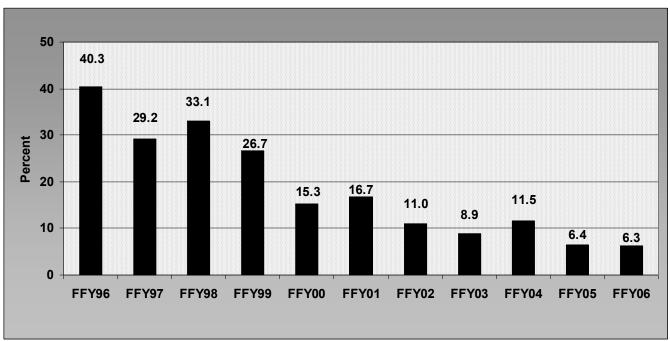
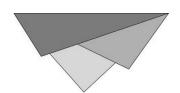


FIGURE 60. Sampled Missouri Tobacco Merchants Who Failed Compliance Checks: FFY 1996-2006.

As required by the federal Synar Amendment that modifies Missouri's responsibilities under the Substance Abuse Prevention and Treatment block grant, ADA conducts comprehensive merchant education that includes mailings, educational visits, compliance checks and follow-ups to owners, managers and clerks. During a compliance check, a 16- or 17-year-old working with ADA staff attempts to purchase a tobacco product. For an over-the-counter purchase, the tobacco merchant is considered non-compliant if the clerk fails to ask for either the under-age buyer's identification or age prior to requesting payment and then subsequently fails to refuse sale. For vending machine purchases, the tobacco merchant is considered non-compliant if the under-age buyer can insert a quarter into the vending machine and leave the premises without employees asking for either identification or age.

In Federal Fiscal Year (FFY) 2006, an estimated 6.3% of sampled Missouri tobacco merchants failed to deny cigarettes or smokeless tobacco to adolescents less than 18 years, a non-compliance rate below the Synar target of 20% (Figure 60). For FFY 1996 through 2006, the percent of non-compliant tobacco merchants decreased by an average of 10.6% per year.



#### **Treatment Services and Outcomes**

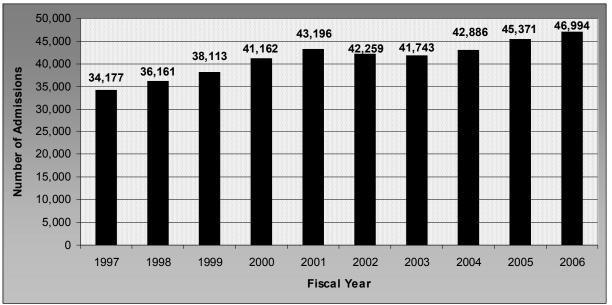


FIGURE 61. Admissions to ADA-Sponsored Treatment Programs: Fiscal Years 1997-2006.\*

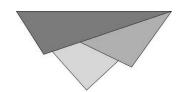
\*NOTE: Data subject to change as records in the database are updated quarterly

To produce consistent and positive results, treatment programs must be well implemented and evaluated. Based on research findings and the general consensus of experts in the addiction field, most treatment and recovery programs work best in community-based, coordinated systems of comprehensive services. Because no single treatment approach is effective for all persons, programs should offer options. Programs of comprehensive services.

In FY 2006 ADA supported substance abuse clinical treatment for almost 47,000 consumer admissions, an estimated one admission for every 123 Missourians (Figure 61).<sup>53</sup> The most common treatment program was Primary Recovery Plus (52.0% of total consumer admissions), followed by the Comprehensive Substance Treatment and Rehabilitation Program (CSTAR) for Women and Children (15.1%), CSTAR General Population (11.3%), and clinical Substance Abuse Traffic Offender Program (10.7%). Other treatment programs were CSTAR Adolescents (7.5%), CSTAR Opioid (2.4%) and Compulsive Gambling (0.9%). Additionally, almost 5,000 Missourians were provided non-clinical services through Recovery Supports programs.

Since FY 1997, the number of consumer admissions to ADA clinical treatment programs increased by approximately 12,800, an average of 3.3% per year. The average annual increase in admissions is consistent with the Healthy People 2010 targets of reducing the treatment gap for illicit drugs in the general population {See Goal 26-18 listed in Table 9} and reducing the treatment gap for alcohol problems {See Goal 26-21 listed in Table 9}. Also, Missouri's 24.8% average annual increase in CSTAR Opioid admissions is consistent with the Healthy People 2010 target of increasing the number of admissions to substance abuse treatment for injection drug use {See Goal 26-20 listed in Table 9}.

#### **Treatment Services and Outcomes**



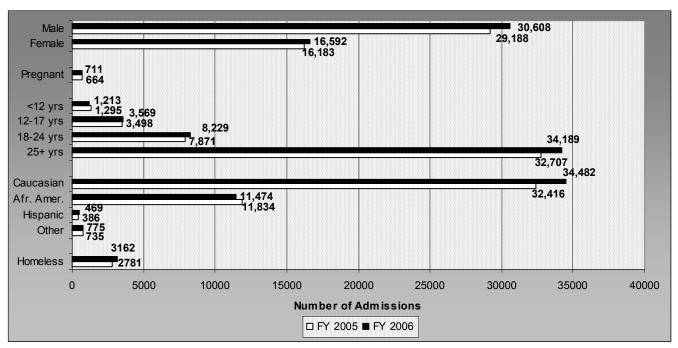
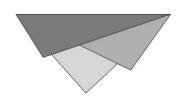


FIGURE 62. Admissions to ADA-Sponsored Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.\*

\*NOTE: Data subject to change as records in the database are updated quarterly.

In FY 2006, approximately two-thirds of consumer admissions to ADA-supported clinical treatment programs were male (Figure 62). Among female admissions, 711 reported being pregnant, an estimated 4%. Approximately three-quarters of admissions were older adults 25+ years. However, young adults 18-24 years had a higher proportion of admission to an ADA-supported treatment program, an estimated one in every 72 individuals. Approximately three-quarters of admissions were Caucasians, but African Americans had a higher proportion of admissions, an estimated one in every 58 individuals.

For those consumer admissions with available data, approximately three-quarters reported annual incomes of less than \$10,350. Of these, 77% reported not having an income at time of admission. In comparison, Missouri's 1999 per capita income was \$19,936.<sup>62</sup> Additionally, 3,162 admissions (6%) reported being homeless.



# Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR) Adolescent

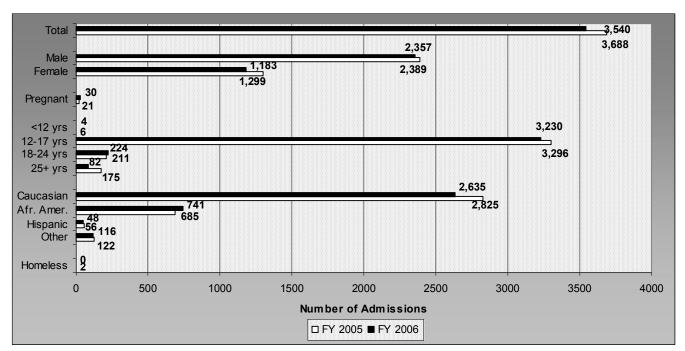
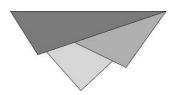


FIGURE 63. Admissions to ADA-Sponsored CSTAR Adolescent Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.\*
\*NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly

In Fiscal Year 2006, there were over 3,500 consumer admissions to the CSTAR Adolescent treatment program, an estimated one admission for every 151 Missouri adolescents 12-17 years (Figure 63). Approximately two-thirds of those admissions were male. Among female admissions, 30 reported being pregnant, an estimated 3%. While approximately three-quarters of admissions were Caucasians, African Americans (an estimated one in every 103) and other race/ethnicities (one in every 75) had a higher proportion of admissions.

# Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR) Adolescent



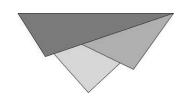
COMPREHENSIVE SUBSTANCE TREATMENT AND REHABILITATION PRO- GRAM (CSTAR): ADOLESCENTS						
	FY2005	FY2006	Percent Difference			
Primary Substance of	of Use or a	buse				
Alcohol	9.6%	9.4%	-0.1%			
Marijuana	76.6%	79.8%	3.2%			
Cocaine	2.1%	2.0%	-0.1%			
Methamphetamine	4.0%	3.3%	-0.7%			
Heroin	0.3%	0.3%	0.0%			
Other drug	2.6%	2.7%	0.1%			
Co-dependent	4.9%	2.5%	-2.4%			
Age at First Use						
< 13 years	37.3%	35.9%	-1.4%			
13-18 Years	61.3%	62.9%	1.5%			
19+ years	1.4%	1.3%	-0.2%			
Other Substance of	Use or abu	se				
Yes	51.4%	48.6%	-2.8%			
Co-Occurring Menta	l Health Di	sorder				
Yes	18.6%	17.2%	-1.4%			
Source of Referral to	Treatmen	it				
Courts	59.9%	64.4%	4.5%			
Self-referral	17.7%	13.4%	-4.4%			
School	5.2%	4.6%	-0.6%			
Mental Health	4.1%	4.0%	-0.1%			
Discharge Status fro	m Treatme	ent				
Completed treatment	27.3%	23.3%	-4.0%			
Discharged - addi-						
tional services rec-	26.5%	27.1%				
ommended			0.5%			
Discharged - con-	25.4%	27.8%				
sumer non-compliant	20.4%	∠1.0%	2.5%			
Consumer termi-	12.4%	14.4%	STAN DESTRUMENT			
nated treatment	14.70	17.770	2.0%			
Consumer incarcer-	1.6%	2.2%				
ated	Intercolonia.		0.6%			
Administratively closed	5.5%	3.5%	-2.0%			

Averaging data for FY 2005 and 2006, over threequarters of CSTAR Adolescent consumer admissions reported marijuana as their primary substance of use or abuse while approximately one-tenth reported alcohol (Table 1). Over one-third reported first using their primary substance before becoming a teenager. Half of admissions reported using at least one other substance, and over one-sixth reported a cooccurring mental health disorder.

The majority of consumer admissions to CSTAR Adolescent programs were referred by the courts. However, approximately one-sixth were self-referrals. Over half the admissions completed the planned course of treatment; two-fifths did not.

TABLE 1. Characteristics of Consumers Admitted to ADA-Sponsored CSTAR Adolescent Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data subject to change as records in the database are updated quarterly.



# Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR) Adolescent

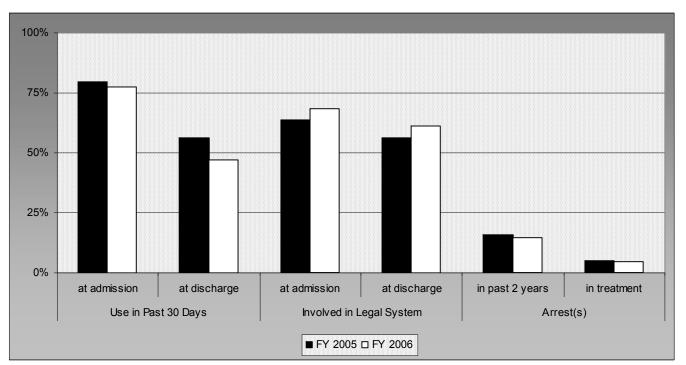


FIGURE 64. Outcomes for Admissions to ADA-Sponsored CSTAR Adolescent Treatment Programs: Fiscal Years 2005-2006.

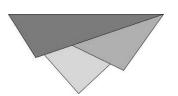
NOTE: Data subject to change as records in the database are updated quarterly

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, over one-half of admissions reported using alcohol or illicit drugs during the month prior to discharge from treatment (Figure 64). Overall, reported pastmonth use from admission to discharge significantly decreased by 32.8%. However, if only admissions who completed treatment are considered, then reported past-month use significantly decreased by 55.3% from admission (77%) to discharge (35%). Past-month use also decreased among admissions who did not complete treatment, but not as dramatically (-14.1%).

Involvement with the criminal justice system significantly decreased by 11.6%. Additionally, only 5% of consumer admissions reported being arrested while in treatment.

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## Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR) Women and Children.



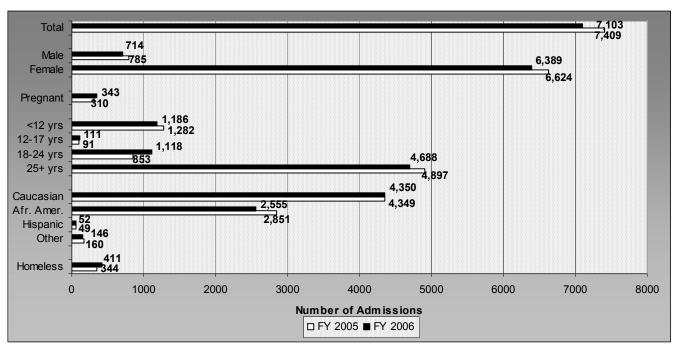
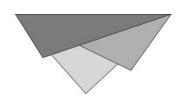


FIGURE 65. Admissions to ADA-Sponsored CSTAR Women and Children Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.

NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly.

In FY 2006, there were almost 7,500 consumer admissions to the CSTAR Women and Children treatment program, an estimated one admission for every 506 Missouri women and children (Figure 65). Approximately one-sixth of admissions were children less than 12 years who accompanied their mothers into treatment. Among female admissions, 343 reported being pregnant, an estimated 5%. In FY 2006, 134 babies (93%) born to pregnant women enrolled in the CSTAR Women and Children treatment program were born drug-free. While approximately three-fifths of admissions were Caucasians, African American (an estimated one in every 174) women and children had a higher proportion of admissions.

For those consumer admissions with available data, nine-tenths reported annual incomes of less than \$10,350. Of these, 78% reported not having an income at time of admission. In comparison, Missouri's 1999 per capita income was \$19,936. Additionally, over 400 admissions (6%) reported being homeless.



## Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR) Women and Children.

Averaging data for Fiscal Years 2005 and 2006, onequarter of CSTAR Women and Children consumer admissions reported cocaine as their primary substance of use or abuse, while alcohol, marijuana and methamphetamine were reported by approximately onesixth each (Table 2). Approximately two-fifths of admissions reported not using their primary substance for the first time until adulthood. Half of admissions reported using at least one other substance, and approximately one-third reported a co-occurring mental health disorder.

Over one-sixth of CSTAR Women and Children consumer admissions were dependent children. In FY 2006, 106 children were returned to their mothers after the mothers successfully completed the CSTAR Women and Children treatment program.

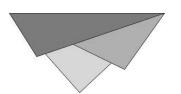
Approximately one-third of consumer admissions were referred to CSTAR Women and Children programs by the courts. However, over two-fifths were self-referrals. Two-fifths of admissions completed the planned course of treatment. Over two-fifths did not.

			ENT AND REHABILITATION PRO- AND CHILDREN
	FY2005	FY2006	Percent Difference
Primary Substance	of Use or a	buse	
Alcohol		15.9%	0.0%
Marijuana	17.6%	17.1%	-0.5%
Cocaine	25.3%	25.3%	0.0%
Methamphetamine	14.8%	14.3%	-0.5%
Heroin		4.5%	0.9%
Other drug	4.2%	4.8%	0.6%
Co-dependent	18.6%	18.1%	-0.5%
Age at First Use			
< 13 years	25.7%	25.1%	-0.6%
13-18 Years	34.9%	34.7%	-0.3%
19+ years	39.4%	40.2%	0.9%
Other Substance of	Use or abu	se	
Yes	NEWSCHILL SECTION OF STREET	50.0%	-0.6%
Co-Occurring Menta			3.2.7
Yes	32.4%	33.2%	0.7%
Source of Referral to	Treatmen	t	2000
Courts		30.7%	-3.0%
Self-referral		43.0%	0.3%
Mental Health	5.0%	5.1%	0.1%
Discharge Status fro	200000000000000000000000000000000000000	18/00/1/10/2009	0.170
Completed treatment		15.8%	0.8%
Discharged - addi-	10.070	10.070	0.070
tional services rec-	23.2%	25.9%	
ommended	25.270		2.7%
Discharged - con-	MAN PACIFIC ENGINEERS	25.5%	<del>- 10 10</del>
sumer non-compliant	22.6%		2.9%
Consumer termi-	21.9%	19.7%	
nated treatment			-2.2%
Consumer incarcer-	2.0%	1.9%	
ated			-0.1%
Administratively closed	14.0%	9.0%	-4.9%

TABLE 2. Characteristics of Consumers Admitted to ADA-Sponsored CSTAR Women and Children Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data subject to change as records in the database are updated quarterly.

# Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR) Women and Children.



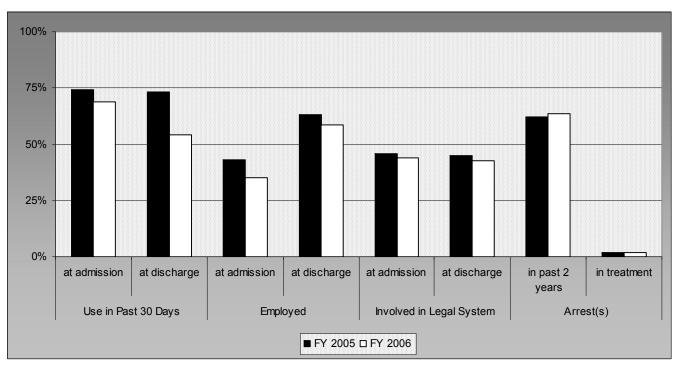


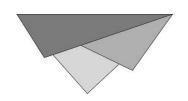
FIGURE 66. Outcomes for Admissions to ADA-Sponsored CSTAR Women and Children Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data subject to change as records in the database are updated quarterly.

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, approximately two-thirds of admissions reported using alcohol or illicit drugs during the month prior to discharge from treatment (Figure 66). Overall, reported past-month use from admission to discharge significantly decreased by 5.8%. However, if only admissions who completed treatment are considered, then reported past-month use significantly decreased by 40.8% from admission (73%) to discharge (43%) while use actually increased among admissions who did not complete treatment (10.3%).

Overall employment significantly increased by 58.6% from admission to discharge so that approximately three-fifths of consumer admissions were employed by time of discharge. However, if only admissions who completed treatment are considered, then employment significantly increased by 76.4% from admission (40%) to discharge (71%). Employment also increased among admissions who did not complete treatment, but not as dramatically (+42.3%).

Involvement with the criminal justice system slightly decreased by 1.8%. Only 2% of consumer admissions reported being arrested while in treatment.



## Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR): General Population

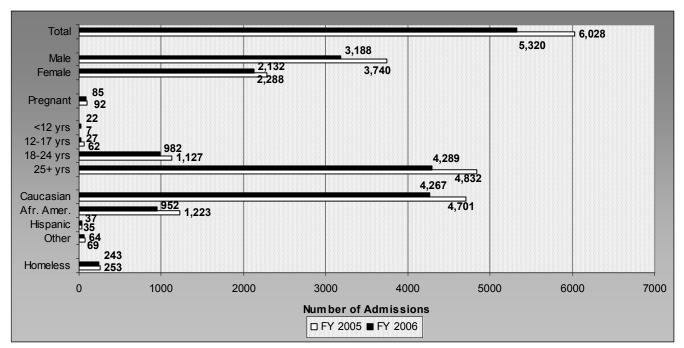


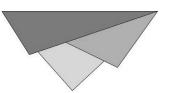
FIGURE 67. Admissions to ADA-Sponsored CSTAR General Population Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.

NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly.

In Fiscal Year 2006, there were over 5,000 consumer admissions to the CSTAR General Population treatment program, an estimated one admission for every 830 Missourians (Figure 67). Approximately three-fifths of admissions were male. Among female admissions, 85 reported being pregnant, an estimated 4%. Over two hundred admissions (5%) reported being homeless. While approximately four-fifths of admissions were Caucasians, African Americans (an estimated one in every 491) had a higher proportion of general population admissions.

For those consumer admissions with available data, over four-fifths reported annual incomes of less than \$10,350. Of these, 68% reported not having an income at time of admission. In comparison, Missouri's 1999 per capita income was \$19,936. Well over two hundred admissions (5%) reported being homeless.

## Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR): General Population

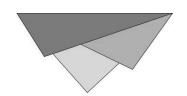


COMPREHENSIVE SUBSTANCE TREATMENT AND REHABILITATION PRO- GRAM (CSTAR): GENERAL POPULATION						
	FY2005	FY2006	Percent Difference			
Primary Substance of Use or abuse						
Alcohol	33.1%	33.1%	0.0%			
Marijuana	26.8%	24.2%	-2.5%			
Cocaine	15.8%	16.5%	0.7%			
Methamphetamine	16.4%	16.8%	0.4%			
Heroin	1.9%	1.9%	0.0%			
Other drug	5.4%	6.3%	0.9%			
Co-dependent	0.5%	1.0%	0.5%			
Age at First Use						
< 13 years	15.3%	15.9%	0.6%			
13-18 Years		49.1%	-1.8%			
19+ years	33.8%	35.0%	1.2%			
Other Substance of	Use or abu	se				
Yes	53.8%	53.1%	-0.7%			
Co-Occurring Menta	I Health Di	sorder				
Yes	36.8%	37.5%	0.7%			
Source of Referral to Treatment						
Courts	42.2%	37.1%	-5.0%			
Self-referral		31.7%	0.6%			
Mental Health	9.0%	9.8%	0.9%			
Discharge Status fro	240000000000000000000000000000000000000					
Completed treatment	33.8%	38.2%	4.4%			
Discharged - addi-	00.070	30.270	1.17			
tional services rec-	15.8%	15.4%				
ommended	10.070	1021 1000	-0.4%			
Discharged - con-	22.0%	21.9%	9-107-00784550			
sumer non-compliant			-0.2%			
Consumer termi-	11.1%	13.1%	1000			
nated treatment			2.0%			
Consumer incarcer-	2.0%	1.9%	D 407			
ated		10.170.030	-0.1%			
Administratively	13.9%	7.9%	6.0%			
closed	detice of (	7 DELL 1967 MIN 1997 1999	-6.0%			

TABLE 3. Characteristics of Consumers Admitted to ADA-Sponsored CSTAR General Population Treatment Programs: Fiscal Years 2005-2006. NOTE: Data subject to change as records in the database are updated quarterly.

Averaging data for FY 2005 and 2006, one-third of CSTAR General Population consumer admissions reported alcohol as their primary substance of use or abuse. One-quarter reported marijuana and one-sixth each reported cocaine and methamphetamine (Table 3). One-half reported first using their primary substance while adolescents. Over half of admissions reported using at least one other substance. Over one-third reported a co-occurring mental health disorder.

Approximately two-fifths of consumer admissions were referred to CSTAR General Population by the courts. Almost one-third were self-referrals. Over one-half of admissions completed the planned course of treatment. Approximately one-third did not.



## Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR): General Population

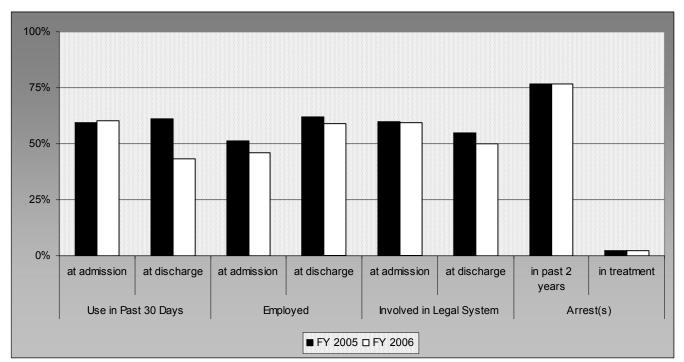


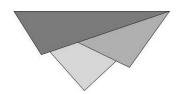
FIGURE 68. Outcomes for Admissions to ADA-Sponsored CSTAR General Population Treatment Programs: Fiscal Years 2005-2006.\* \*NOTE: Data subject to change as records in the database are updated quarterly.

Averaging data for Fiscal Years 2005 and 2006 and for those consumer admissions with complete data, over one-half of admissions reported using alcohol or illicit drugs during the month prior to discharge from treatment (Figure 68). Overall, reported past-month use from admission to discharge significantly decreased by 9.1%. However, if only admissions who completed treatment are considered, then reported past-month use significantly decreased by 34.5% from admission (60%) to discharge (40%) while use actually increased among admissions who did not complete treatment (11.0%).

Overall employment significantly increased by 25.1% from admission to discharge so that approximately three-fifths of consumer admissions were employed by the time of discharge. However, if only admissions who completed treatment are considered, then employment significantly increased by 28.4% from admission (52%) to discharge (67%). Employment also increased among admissions who did not complete treatment, but not as dramatically (+16.6%).

Involvement with the criminal justice system significantly decreased by 11.7%. Only 2% of consumer admissions reported being arrested while in treatment.

# Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR): Opioid



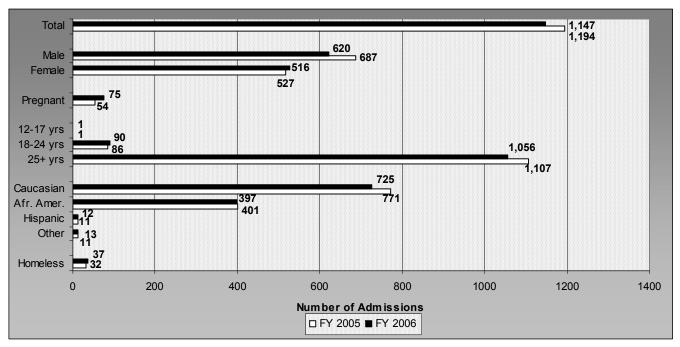
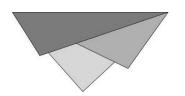


FIGURE 69. Admissions to ADA-Sponsored CSTAR Opioid Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.

NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly.

In FY 2006, there were over 1,000 consumer admissions to the CSTAR Opioid treatment program, an estimated one admission for every 3,855 adult Missourians (Figure 69). Over half the admissions were male. Among female admissions, 75 reported being pregnant, an estimated 14%. While almost two-thirds of admissions were Caucasians, African American adults (an estimated one in every 1,778) had a higher proportion of admissions.

For those consumer admissions with available data, approximately four-fifths reported annual incomes of less than \$10,350. Of these, 66% reported not having an income at time of admission. In comparison, Missouri's 1999 per capita income was \$19,936. Thirty-seven admissions (3%) reported being homeless.



## Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR): Opioid

Averaging data for FY 2005 and 2006, one-quarter of CSTAR Opioid consumer admissions reported a substance other than heroin as their primary substance of use or abuse (Table 4). Three-fifths reported not using their primary substance for the first time until adulthood. Over one-half of admissions reported using at least one other substance. One-tenth reported a co-occurring mental health disorder.

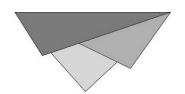
Four-fifths of consumer admissions to CSTAR Opioid were self-referrals. Given the longer length of treatment for opioid addiction, many FY 2006 admissions were still in treatment at the end of the fiscal year. However, one-sixth of admissions completed the planned course of treatment while approximately two-fifths did not.

COMPREHENSIVE SUBSTANCE TREATMENT AND REHABILITATION PROGRAM (CSTAR): OPIOID TREATMENT					
	FY2005	FY2006	Percent Difference		
Primary Substance of Use or abuse					
Alcohol	2.8%	1.7%	-1.1%		
Marijuana	1.3%	0.2%	-1.2%		
Cocaine	1.6%	1.0%	-0.6%		
Methamphetamine		0.2%	0.0%		
Heroin		74.6%	-0.9%		
Other drug		22.3%	3.8%		
Co-dependent	0.1%	0.1%	0.0%		
Age at First Use					
< 13 years	2.2%	2.4%	0.2%		
13-18 Years		37.6%	1.4%		
19+ years	61.6%	60.1%	-1.6%		
Other Substance of	Use or abu	se			
Yes	59.0%	51.5%	-7.5%		
Co-Occurring Menta	I Health Dis	sorder			
Yes		12.1%	2.7%		
Source of Referral to	Treatmen	t			
Courts		1.9%	-0.5%		
Self-referral		78.6%	-4.7%		
Mental Health		5.7%	0.9%		
Discharge Status fro	Vitarastas:	1200 A 100 A	0.070		
Completed treatment		5.1%	-3.5%		
Discharged - addi-	0.070	0.170	-0.070		
tional services rec-	8.6%	10.2%			
ommended	0.070	10.270	1.7%		
Discharged - con-	0.007	0.1.007			
sumer non-compliant	8.9%	21.2%	12.2%		
Consumer termi-	00.00/	40.007	000 1710 000 000		
nated treatment	23.0%	42.3%	19.4%		
Consumer incarcer-	3.5%	5.1%			
ated	3.076	5.176	1.6%		
Consumer Died	5.1%	3.6%	-1.4%		
Administratively Closed	37.7%	5.1%	-32.6%		

TABLE 4. Characteristics of Consumers Admitted to ADA-Sponsored CSTAR Opioid Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data subject to change as records in the database are updated quarterly.

# Treatment Services and Outcomes: Comprehensive Substance Treatment And Rehabilitation (CSTAR): Opioid



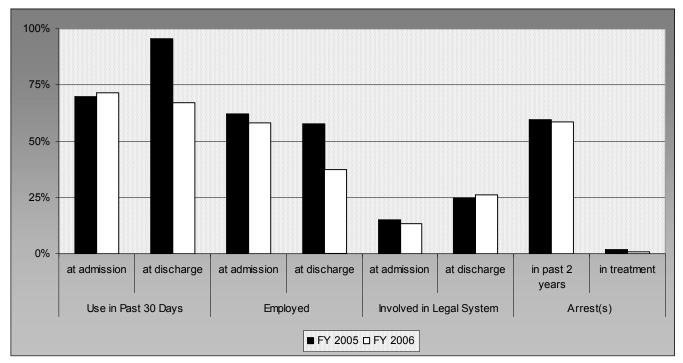
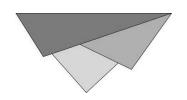


FIGURE 70. Outcomes for Admissions to ADA-Sponsored CSTAR Opioid Treatment Programs: Fiscal Years 2005-2006.\*
\*NOTE: Data subject to change as records in the database are updated quarterly.

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, over nine-tenths of admissions reported using alcohol or illicit drugs during the month prior to discharge from treatment (Figure 70). While overall reported past-month use from admission to discharge actually increased by 30.5%, if only admissions who completed treatment are considered, then reported past-month use significantly decreased by 24.3% from admission (83%) to discharge (63%).<sup>63</sup>

Overall employment significantly decreased by 17.7% from admission to discharge so that only half of consumer admissions were employed by the time of discharge. However, if only admissions who completed treatment are considered, then employment remained generally unchanged from admission (39%) to discharge (38%), while decreasing by 14.2% among those who did not complete treatment.

Although involvement with the criminal justice system increased by 76.6%, only 1% of consumer admissions reported being arrested while in treatment.



### **Treatment Services and Outcomes: Primary Recovery Plus**

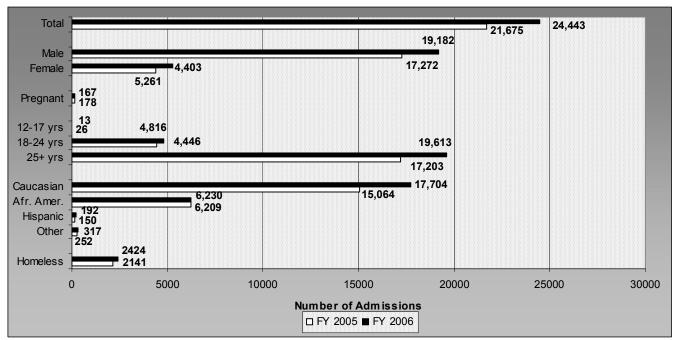


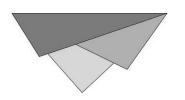
FIGURE 71. Admissions to ADA-Sponsored Primary Recovery Plus Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.

NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly

In FY 2006, there were over 24,000 consumer admissions to the Primary Recovery Plus treatment program, an estimated one admission for every 181 adult Missourians (Figure 71). Over three-quarters of admissions were male. Among female admissions, 167 reported being pregnant, an estimated 3%. While four-fifths of admissions were Caucasians, African American adults (an estimated one in every 75) had a higher proportion of admissions.

For those consumer admissions with available data, over three-quarters reported annual incomes of less than \$10,350. Of these, 79% reported not having an income at time of admission. In comparison, Missouri's 1999 per capita income was \$19,936. Almost 2,500 admissions (10%) reported being homeless.

### **Treatment Services and Outcomes: Primary Recovery Plus**



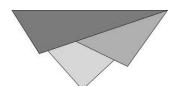
Averaging data for FY 2005 and 2006, one-third of Primary Recovery Plus consumer admissions reported alcohol as their primary substance of use or abuse. Approximately one-quarter reported marijuana, and approximately one-sixth each reported cocaine and methamphetamine (Table 5). Over half reported first using their primary substance while adolescents. Over one-half of admissions reported using at least one other substance. One-fifth reported a co-occurring mental health disorder.

Approximately one-half of consumer admissions were referred to Primary Recovery Plus by the courts. One-third were self-referrals. Over two-fifths of admissions completed the planned course of treatment while slightly less than two-fifths did not.

	E)/2225	E1/0000	Percent
Diamen College of the construction	FY2005	FY2006	Difference
Primary Substance of Use or abuse	0.1.00(		1 200
Alcohol	31.9%	33.2%	1.3%
Marijuana	27.4%	26.1%	-1.3%
Cocaine	16.3%	17.3%	0.9%
Methamphetamine	14.0%	15.0%	1.0%
Heroin	5.7%	3.9%	-1.8%
Other drug	3.7%	4.1%	0.3%
Co-dependent	0.8%	0.5%	-0.3%
Age at First Use			
< 13 years	15.8%	15.8%	0.0%
13-18 Years	51.0%	51.3%	0.2%
19+ years	33.2%	33.0%	-0.2%
Other Substance of Use or abuse			
Yes	52.4%	51.7%	-0.6%
Co-Occurring Mental Health Disorder			
Yes	19.7%	20.4%	0.8%
Source of Referral to Treatment			
Courts	51.8%	44.7%	-7.1%
Self-referral	33.3%	33.1%	-0.2%
Mental Health	4.3%	4.8%	0.5%
Discharge Status from Treatment			
Completed treatment	25.0%	23.4%	-1.5%
Discharged - additional services recommended	21.9%	22.3%	0.4%
Discharged - consumer non-compliant	22.7%	24.3%	1.6%
Consumer terminated treatment	12.6%	14.5%	1.9%
Consumer incarcerated	2.2%	2.5%	0.4%
Administratively closed	14.8%	11.7%	-3.1%

TABLE 5. Characteristics of Consumers Admitted to ADA-Sponsored Primary Recovery Plus Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data subject to change as records in the database are updated quarterly.



### **Treatment Services and Outcomes: Primary Recovery Plus**

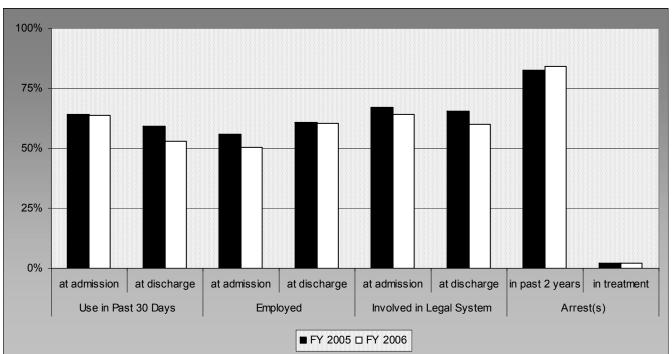


FIGURE 72. Outcomes for Admissions to ADA-Sponsored Primary Recovery Plus Treatment Programs: Fiscal Years 2005-2006.

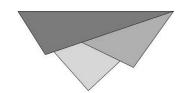
NOTE: Data subject to change as records in the database are updated quarterly.

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, over one-half of admissions reported using alcohol or illicit drugs during the month prior to discharge from treatment (Figure 72). Overall, reported pastmonth use from admission to discharge significantly decreased by 11.7%.<sup>61</sup> However, if only admissions who completed treatment are considered, then reported past-month use significantly decreased by 34.8% from admission (63%) to discharge (41%), while use actually increased among admissions who did not complete treatment (3.4%).

Overall employment significantly increased by 15.0% from admission to discharge so that approximately three-fifths of consumer admissions were employed by the time of discharge. However, if only admissions who completed treatment are considered, then employment significantly increased by 20.0% from admission (57%) to discharge (69%). Employment also increased among admissions who did not complete treatment, but not as dramatically (+7.0%).

Involvement with the criminal justice system significantly decreased by 4.4%. Only 2% of consumer admissions reported being arrested while in treatment.

### **Treatment Services and Outcomes: Recovery Supports**



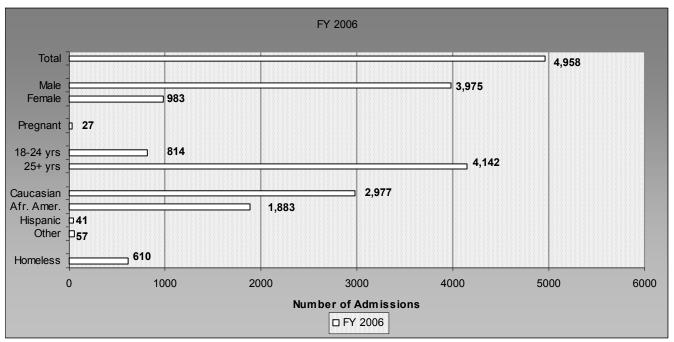
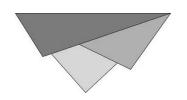


FIGURE 73. Self-Referrals to ADA-Sponsored Recovery Supports Service Programs by Socio-Demographic: Fiscal Year 2006.

NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly

To promote better consumer outcomes, Recovery Supports programs provide non-clinical services to consumers who may also be admitted to clinical treatment. In FY 2006, there were almost 5,000 self-referrals to the Recovery Supports service program (Figure 73). Four-fifths of individuals were male. Among females, 27 reported being pregnant, an estimated 3%. While three-fifths of self-referrals were Caucasians, African American adults (an estimated one in every 248) had a higher proportion of self-referrals.

For those individuals with available data, over four-fifths reported annual incomes of less than \$10,350. Of these, 86% reported not having an income at time of entry. In comparison, Missouri's 1999 per capita income was \$19,936.<sup>62</sup> Over 600 individuals (12%) reported being homeless.



### **Treatment Services and Outcomes: Recovery Supports**

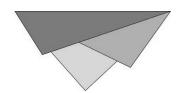
RECOVERY SUPPORTS	
	FY200 6
Primary Substance of Use or abuse	
Alcohol	31.0%
Marijuana	22.1%
Cocaine	25.6%
Methamphetamine	12.0%
Heroin	5.0%
Other drug	3.8%
Co-dependent	0.4%
Age at First Use	
< 13 years	16.3%
13-18 Years	46.2%
19+ years	37.5%
Other Substance of Use or abuse	
Yes	58.5%
Co-Occurring Mental Health Disorder	
Yes	20.2%

TABLE 6. Substance Abuse and Mental Health Characteristics of Consumers Self-Referred to ADA-Sponsored Recovery Supports Service Programs: Fiscal Year 2006.

NOTE: Data subject to change as records in the database are updated quarterly.

Approximately one-third of Recovery Supports self-referrals reported alcohol as their primary substance of use or abuse. Approximately one-quarter reported either cocaine or marijuana, and over one-tenth reported methamphetamine (Table 6). Over two-fifths reported first using their primary substance while an adolescent while over one-third reported not first using their primary substance until adulthood. Approximately three-fifths of individuals reported using at least one other substance. One-fifth reported a co-occurring mental health disorder.

## Treatment Services and Outcomes: Substance Abuse Traffic Offenders Program (SATOP)



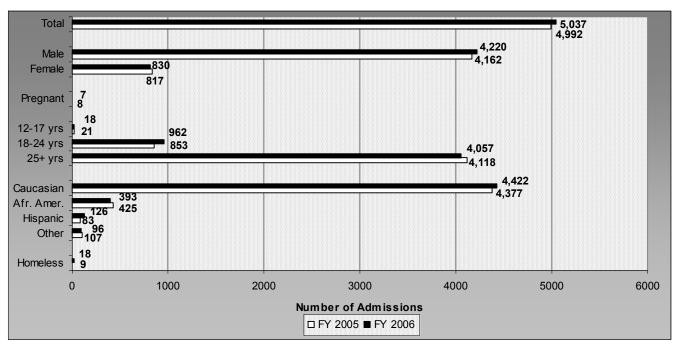
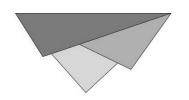


FIGURE 74. Admissions to ADA-Sponsored SATOP Programs by Socio-Demographic: Fiscal Years 2005-2006.

NOTE: Includes all SATOP programming except the Offender Education and Adolescent Diversion Education programs. Data represents admissions to ADA-supported treatment, not individuals. Data unduplicated by state identification number and program category and subject to change as records in the database are updated quarterly. Due to missing data, some demographic variables may not sum to the Fiscal Year total.

In FY 2006, there were over 5,000 consumer admissions to the SATOP program of Weekend Intervention Program, Clinical Intervention Program or Serious and Repeat Offender Program. An estimated one admission for every 927 Missourians 16 years or older (Figure 74). Over four-fifths of admissions were male. Among female admissions, seven reported being pregnant, an estimated 1%. Participation in SATOP was most common among individuals aged 18-24 years (1 in every 613 individuals). Almost nine-tenths of admissions were Caucasians.



## Treatment Services and Outcomes: Substance Abuse Traffic Offenders Program (SATOP)

Averaging data for FY 2005 and 2006, over nine-tenths of SATOP consumer admissions reported alcohol as their primary substance of use or abuse while approximately 5% reported marijuana (Table 7). Approximately three-quarters reported first using their primary substance while adolescents. Approximately one-quarter of admissions reported using at least one other substance. Five percent reported a co-occurring mental health disorder.

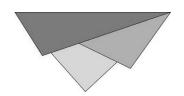
All SATOP consumer admissions were referred by the courts because of alcohol- or drug-related traffic offenses. Over ninetenths of admissions completed the planned course of treatment.

SUBSTANCE ABUSE TRAFFIC OFFENDER	S PROGE	RAM (SAT	OP)
	FY200 5	FY200 6	Percent Differ- ence
Primary Substance of Use or abuse			
Alcohol	92.5%	91.5%	-1.0%
Marijuana	4.0%	4.8%	0.9%
Cocaine	0.6%	0.9%	0.3%
Methamphetamine	0.7%	1.3%	0.6%
Heroin	0.2%	0.5%	0.3%
Other drug	1.0%	0.9%	-0.1%
Co-dependent	0.6%	0.1%	-0.5%
Age at First Use			
< 13 years	10.9%	10.4%	-0.5%
13-18 Years	73.4%	72.8%	-0.6%
19+ years	15.7%	16.8%	1.1%
Other Substance of Use or abuse			
Yes	22.3%	24.5%	2.1%
Co-Occurring Mental Health Disorder			
Yes	4.8%	5.3%	0.5%
Source of Referral to Treatment			
Courts	100.0%	100.0%	0.0%
Discharge Status from Treatment			
Completed treatment	83.1%	83.5%	0.4%
Discharged - additional services recommended	8.1%	8.4%	0.3%
Discharged - consumer non-compliant	6.4%	5.6%	-0.7%
Consumer terminated treatment	0.3%	1.1%	0.8%
Consumer incarcerated	0.5%	0.2%	-0.3%
Administratively closed	1.5%	0.9%	-0.6%

TABLE 7. Characteristics of Consumers Admitted to ADA-Sponsored SATOP Programs: Fiscal Years 2005-2006

NOTE: Includes all SATOP programming except the Offender Education and Adolescent Diversion Education programs. Data represents admissions to ADA-supported treatment, not individuals. Data unduplicated by state identification number and program category and subject to change as records in the database are updated quarterly.

# **Treatment Services and Outcomes: Substance Abuse Traffic Offenders Program (SATOP)**



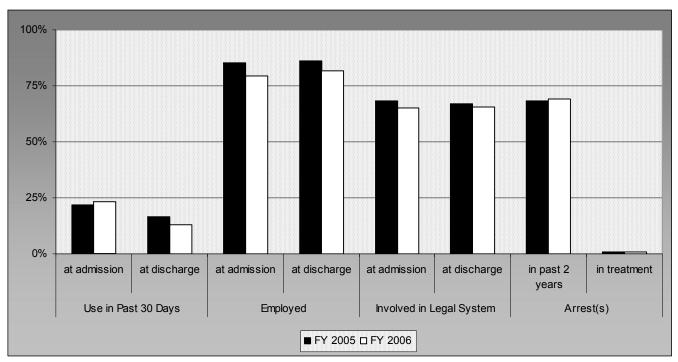
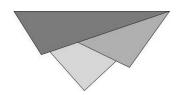


FIGURE 75. Outcomes for Admissions to ADA-Sponsored SATOP Treatment Programs: Fiscal Years 2005-2006.

NOTE: Includes all SATOP programming except the Offender Education and Adolescent Diversion Education programs. Data represents admissions to ADA-supported treatment, not individuals. Data unduplicated by state identification number and program category and subject to change as records in the database are updated quarterly.

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, approximately one-sixth of admissions reported using alcohol or illicit drugs during the month prior to discharge from treatment (Figure 75). Overall, reported past-month use from admission to discharge significantly decreased by 34.4%. However, if only admissions who completed treatment are considered, then reported past-month use significantly decreased by 49.4% from admission (71%) to discharge (9%). Use actually increased among admissions who did not complete treatment (5.2%).

Overall employment increased by 1.9% from admission to discharge so that over four-fifths of consumer admissions were employed by the time of discharge. Involvement with the criminal justice system remained generally unchanged (-0.7%). Only 1% of admissions reported being arrested while in treatment.



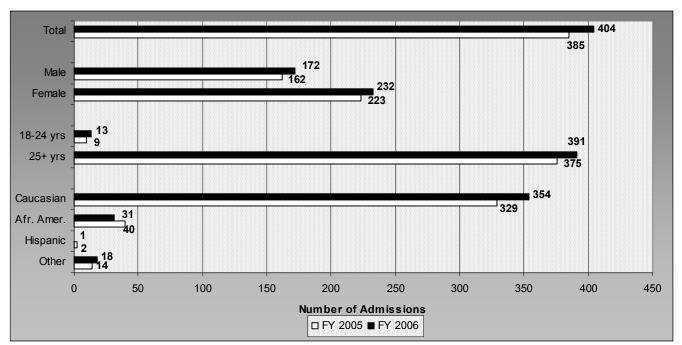
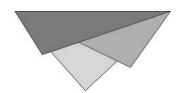


FIGURE 76. Admissions to ADA-Sponsored Compulsive Gambling Treatment Programs by Socio-Demographic: Fiscal Years 2005-2006.

NOTE: Due to missing data, some demographic variables may not sum to the Fiscal Year total. Data subject to change as records in the database are updated quarterly.

In FY 2006, there were approximately 400 consumer admissions to the Compulsive Gambling treatment program, an estimated one admission for every 11,000 adult Missourians (Figure 76). Almost three-fifths of admissions were female. Approximately nine-tenths of admissions were Caucasians.

For those consumer admissions with available data, almost one-half reported annual incomes of less than \$10,350. Of these, 84% reported not having an income at time of admission. In comparison, Missouri's 1999 per capita income was \$19,936.<sup>62</sup>



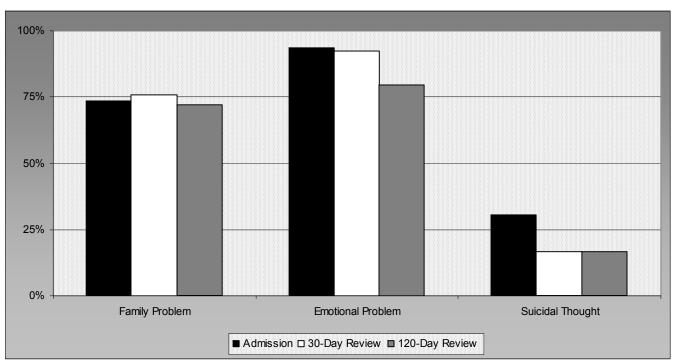
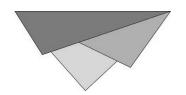


FIGURE 77. Mental Health Characteristics and Outcomes for Admissions to ADA-Sponsored Compulsive Gambling Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data represents individual admissions to ADA-supported treatment. Data unduplicated by state identification number and subject to change as records in the database are updated. [SOURCE: Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, Gambling Outcomes.]

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, the number of admissions reporting suicidal thoughts decreased from admission to the 120-day review by an estimated -22.9%. The number of admissions reporting family problems decreased by an estimated 7.5% (Figure 77). The number of admissions reporting other emotional problems (depression, anxiety, etc.) remained generally unchanged.



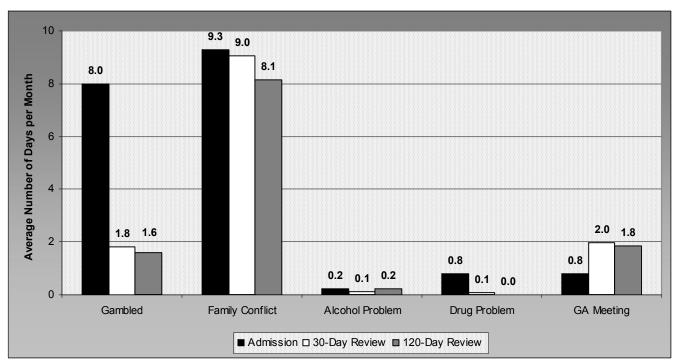
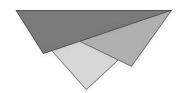


FIGURE 78. Gambling, Family Conflict, Substance Abuse and Meeting Attendance for Consumers Admitted to ADA-Sponsored Compulsive Gambling Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data represents individual admissions to ADA-supported treatment. Data unduplicated by state identification number and subject to change as records in the database are updated. [SOURCE: Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, Gambling Outcomes.]

Averaging data for FY 2005 and 2006 for those consumer admissions with complete data, the average number of days gambled per month decreased from admission to the 120-day review from over one week to less than two days, an estimated - 45.5% (Figure 78). Additionally, the average number of days per month on which a Gambling Anonymous meeting was attended approximately doubled from admission to the 120-day review. Further, the average number of days with serious family conflict and drug problems decreased while the number of days with alcohol problems remained unchanged.



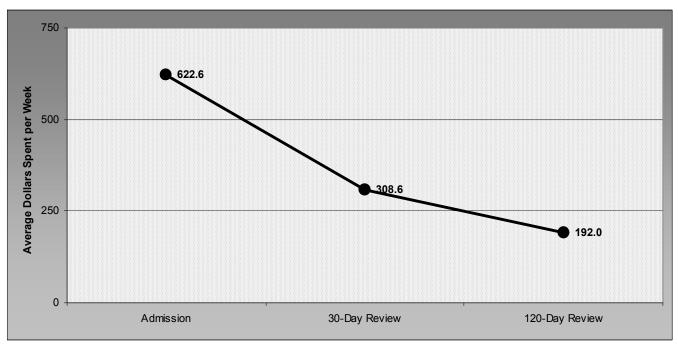
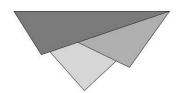


FIGURE 79. Amount Spent on Gambling by Consumers Admitted to ADA-Sponsored Compulsive Gambling Treatment Programs: Fiscal Years 2005-2006.

NOTE: Data represents individual admissions to ADA-supported treatment. Data unduplicated by state identification number and subject to change as records in the database are updated. [SOURCE: Missouri Department of Mental Health, Division of Alcohol and Drug Abuse, Gambling Outcomes.]

Averaging data for FY 2005 and 2006 and for those consumer admissions with complete data, the average amount of money spent per week on gambling decreased from admission to the 120-day review from \$600 to less than \$200, an estimated - 44.1% (Figure 79]



### **Summary: National Outcome Measures (NOMs)**

The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA) has devised National Outcomes Measures (NOMs) to evaluate the cumulative effectiveness of substance use or abuse prevention and treatment activities. The NOMs are separated into domains which address abstinence from drug use and alcohol abuse, resilience and sustainable recovery, types and quality of services provided, access to services and increased retention in services (Table 9). Distinct NOMs have been devised for prevention and treatment activities and programs. States and territories receiving SAMHSA funding will be required to report some of the NOMs during FY 2007.

Although not required to report at this time, over half of overall prevention NOMs for which specific measures have been identified showed improvement in Missouri during FY 2004 through 2006. Improvement was generally more common among those NOMs relating to abstinence from alcohol and drugs and to decreased criminal justice involvement. These include, but are not limited to:

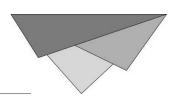
- Increased number of Missourians served through prevention programs, including young adults 18-24 years;
- Increased perception of risks related to marijuana use and cigarette smoking;
- Decreased past-month use of alcohol, illicit drugs other than marijuana and cigarettes or other tobacco products;
- Decreased alcohol-related traffic crashes and injuries;
- Decreased DUI and drug arrests and
- Decreased alcohol and drug referrals of adolescents to juvenile courts.

Although not required to report at this time, ADA-supported treatment is resulting in positive consumer gains consistent with NOMs targets. In the last decade, the number of consumer admissions to ADA-supported treatment has increased by approximately 3% per year. In FY 2006, ADA-supported clinical treatment served one in every 123 Missourians. However, ADA-supported treatment served one Missourian for every 24 aged 12+ who reported needing but not receiving treatment for alcohol dependence or abuse in the past year. Additionally, one Missourian for every four aged 12+ years who reported needing but not receiving treatment for illicit drug dependence or abuse in the past year was served by ADA-supported treatment.

During FY 2005 and 2006, reported abstinence from alcohol or illicit drugs increased by 23% from admission to discharge so that almost one-half of consumer admissions to ADA-supported treatment were abstinent at discharge. Almost two-thirds of admissions were employed at discharge, an increase of 20% from admission. Additionally, involvement with the criminal justice system decreased by 4% from admission to discharge. Finally, while almost three-quarters of admissions had reported being arrested at least once in the previous two years, only 2% were arrested while receiving treatment.



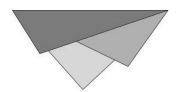
### **Summary: National Outcome Measures (NOMs)**



DOMAIN	OUTCOME	MEASURES		
DOMAIN		Treatment	Prevention	
Reduced Morbid- ity	Abstinence from Drug/Alcohol Use	Reduction in/no change in frequency of use at date of last service compared to date of first service	30-day substance use (nonuse/reduction in use) Perceived risk/harm of use Age of first use Perception of disapproval/attitude	
Employment/ Education	Increased/ Retained Employ- ment or Return to/ Stay in School	Increase in/no change in number of employed or in school at date of last service compared to first service	Perception of workplace policy ATOD related suspensions and expulsions Attendance and enrollment	
Crime and Crimi- nal Justice	Decreased Crimi- nal Justice In- volvement	Reduction in/no change in number of arrests in past 30 days at date of first service compared to last service	Alcohol-related car crashes and injuries  Alcohol and drug-related crime	
Stability in Hous- ing	Increased Stabil- ity in Housing	Increase in/no change in number of consumers in stable housing situation from date of first service compared to last service	NOT APPLICABLE	
Social Connected- ness	Increased Social Supports/ Social Connectedness	UNDER DEVELOPMENT	Family communication around drug use	
Access/ Capacity	Increased Access to Services	Unduplicated count of persons served  penetration rate - numbers served compared to those in need	Number of persons served, by age, gender, race and ethnicity	
	Increased Reten-	Length of stay from date of first service to date of last service	Total number of evidence-based programs and strategies	
Retention	tion in Treatment - Substance Abuse	Unduplicated count of persons served	Percentage of youth seeing, reading, watching, or listening to a prevention message	
Perception of Care	Consumer Per- ception of Care	UNDER DEVELOPMENT	NOT APPLICABLE	
Cost Effective- ness	Cost Effective- ness (Average Cost)	Substance abuse treatment services provided within approved cost per person bands by the type of treatment	Services provided within cost bands	
Use of Evidence- based Practices	Use of Evidence- Based Practices	UNDER DEVELOPMENT	Total number of evidence-based programs and strategies	

TABLE 8. United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration's National Outcome Measures: Substance Abuse – Treatment and Prevention.





## **Summary: Healthy People 2010**

Healthy People 2010 is a comprehensive set of disease prevention and health promotion objectives to be achieved over the first decade of the 21<sup>st</sup> century. Created by scientists both inside and outside government, Healthy People 2010 identifies a wide range of public health priorities and specific, measurable objectives.<sup>63</sup> The two overarching goals of Healthy People 2010 are to:

- 1. increase quality and years of healthy life and
- 2. eliminate health disparities.

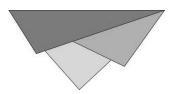
By selecting from among the objectives, such groups as coalitions, communities, providers and state agencies can develop agendas and programs for community health improvement and then measure the results.

As of FY 2006, Missouri has already met the target value for approximately one-quarter of substance abuse-related Healthy People 2010 objectives relevant to the Division of Alcohol and Drug Abuse's activities and for which data are currently available (Table 9). Missouri also has met the target value for approximately one-fifth of tobacco use-related objectives relevant to ADA's activities and for which data are available. ADA-sponsored prevention and treatment programming will continue to address the Healthy People 2010 substance abuse and tobacco use goals so that the quality and length of healthy life are improved while health disparities are eliminated in Missouri.

	GOAL	TARGET VALUE	MISSOURI'S VALUE
Chapter 26.	Substance Abuse		
26-6	Reduce the proportion of adolescents 12-17 years who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol.	30%	25%
26-10a(1)	Increase the proportion of adolescents 12-17 years not using alcohol during the past 30 days.	89%	80%
26-10a(2)	Increase the proportion of adolescents 12-17 years not using any illicit drugs during the past 30 days.	89%	89%
26-10b	Reduce the proportion of adolescents 12-17 years reporting use of marijuana during the past 30 days.	0.7%	8.2%
26-10c	Reduce the proportion of adults (18+ yrs) using any illicit drugs during the past 30 days.	2%	19% (18-25yrs) 6% (26+yrs)
26-11c	Reduce the proportion of adults (18+ yrs) engaging in binge drinking of alcoholic beverages.	6%	45% (18-25yrs) 23% (26+yrs)
26-11d	Reduce the proportion of adolescents 12-17 years engaging in binge drinking of al- coholic beverages.	2%	14%
26-12	Reduce average annual alcohol consumption (14+ yrs).	2 gallons	2.26
26-17a	Increase the proportion of adolescents 12-17 years who perceive great risk associated with consuming 5+ more alcoholic drinks at a single occasion once or twice a week.	80%	36%
26-17b	Increase the proportion of adolescents 12-17 years who perceive great risk associated with smoking marijuana once per month.		34%
26-18	Reduce the treatment gap for illicit drugs in the general population.	in develop- ment	-0.3%
26-20	Increase the number of admissions to substance abuse treatment for injection drug use.		-3.9%
26-21	Reduce the treatment gap for alcohol problems.	in develop- ment	10.6%
Chapter 27.	Tobacco Use		
27-1a	Reduce cigarette smoking by adults (18+ yrs).	12	46% (18-25yrs) 30% (26+yrs)
27-2a	Reduce past month tobacco use by adolescents 12-17 years.	21%	20%
27-2b	Reduce past month cigarette use by adolescents 12-17 years.	16%	17%
27-2c	Reduce past month spit tobacco use by adolescents (high school students).	1%	7%
27-2d	Reduce past month cigar use by adolescents (high school students).	8%	15%
27-7	Increase tobacco use cessation attempts by adolescent (high school students) smokers.	84%	58%
27-14a	Reduce the illegal sales rate to minors through enforcement of laws prohibiting the sale of tobacco products to minors.	5%	6.3%

Table 9. United States Department of Health and Human Services Healthy People 2010 Goals and Target Values and Missouri's Current Value.

### **Summary: Findings**

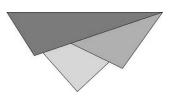


The Division of Alcohol and Drug Abuse implements and supports prevention and treatment programs so that all Missourians will be free to live their lives and pursue their dreams beyond the limitations of alcohol and other drug abuse. Substance abuse prevention averts the tragic consequences of addiction and allows for better use of precious state resources, and treatment programs provide a continuum of services that assist in achieving and maintaining recovery.

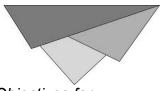
ADA's prevention system implements and supports evidence-based programs that address individual, peer, family, community and environmental risk factors. Statewide media brings ADA's prevention message to an estimated one in every 1.3 Missourians. Also, targeted prevention activities serve approximately one in every 114 Missourians through regional support centers, one in every 73 Missourians through community-based programs and one in every 300 school-aged children through school-based programs. ADA also serves over 2,000 Missourians with hearing impairments.

ADA supports almost 47,000 admissions for treatment, an estimated one admission for every 123 Missourians. The most common program is Primary Recovery Plus, followed by Comprehensive Substance Treatment and Rehabilitation Program (CSTAR) for Women and Children, CSTAR General Population, the Substance Abuse Traffic Offender Program and Recovery Supports. Over the last decade the number of admissions to ADA-supported treatment increased by almost 2,000 per year. However, over 400,000 Missourians 12+ years reported needing but not receiving treatment for alcohol dependence or abuse; and over 135,000 reported needing but not receiving treatment for illicit drug dependence or abuse.

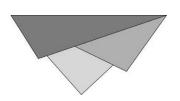
Participation in ADA-supported treatment programs results in improved customer outcomes, especially among those who complete the full course of treatment. As a result, Missouri has shown improvement in – or met – many of the objectives and outcome measures which were developed by federal agencies to guide substance use and abuse prevention and treatment activities and evaluate the results. ADA will continue its mission in working side by side with individuals, families, agencies and diverse communities to establish a philosophy, policies, standards and quality outcomes for prevention and treatment for Missourians challenged by substance abuse and addiction until realization of its vision that all Missourians are free to live their lives and pursue their dreams beyond the limitations of alcohol and other drug abuse.



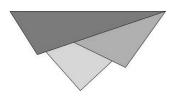
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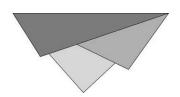
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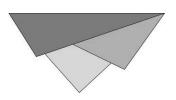


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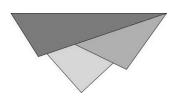
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### **Appendix B. List of Tables**

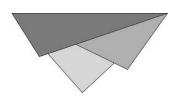


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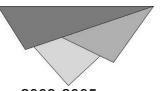
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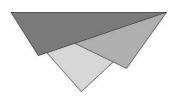
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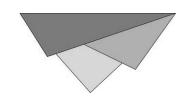


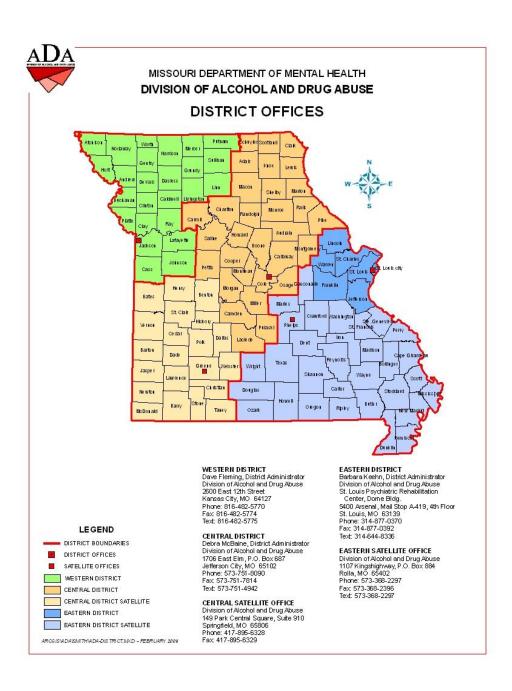
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MISSOURI DEPARTMENT OF MENTAL HEALTH
Division of Alcohol and Drug Abuse
1706 East Elm; P.O. Box 687
Jefferson City, MO 65102
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